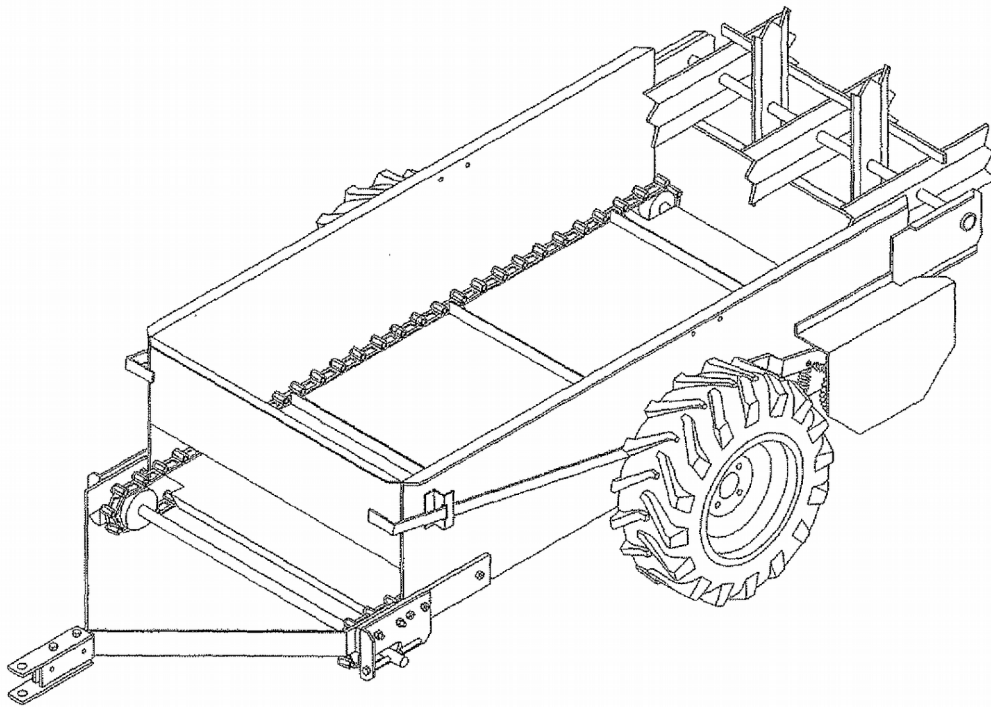


# OPERATOR'S MANUAL

**Millcreek Model:  
15 & 22 Spreader**



PUBLICATION DATE: 9/25/02, Rev. 3

MILLCREEK PART # 43800

Millcreek Manufacturing  
525 Reservoir Road  
Honey Brook PA 19344  
Phone 1800-311-1323



**WARNING: DO NOT assemble, operate, or maintain this equipment without first reading and understanding the information provided in this manual. Failure to follow all safety precautions as stated in the manual may result in serious personal injury or death.**

## WARRANTY INFORMATION

Millcreek Manufacturing Company (hereinafter called the Company) warrants to the original Purchaser, the Equipment, manufactured by the Company, to be free from defects in material and workmanship under normal use and service. The Company obligation under this Warranty shall be limited to replacement or repair of any parts thereof, free of charge, to the original Purchaser, at their place of business, provided, however, that the part(s) to be replaced or repaired, shall, within one year after delivery to the original Purchaser, be demonstrated to be defective; which determination shall be made by the Company. The said components or parts must be returned through the Selling Dealer or Distributor directly to the Company with all transportation charges prepaid. Notice of defect shall be furnished in writing to the Seller and to the agent through whom the machinery was purchased, disclosing in full all known defects and failure in operation and use. Reasonable time shall be given to the Seller to remedy any such defects and failures.

This Warranty does not cover, under any circumstances, any parts, components, or materials which, in the opinion of the Seller and the Company, have been subjected to neglect, misuse, alteration, accident, or repaired with parts other than those manufactured by and obtained from Millcreek Manufacturing Company.

This Warranty does not cover components which are already covered by a separate warranty provided by the supplier of said parts or components.

**This Warranty is made in lieu of all other warranties, expressed or implied, including any warranty of merchantability and fitness for use and purpose and of all other obligations or liabilities on the Company part and any implied warranty. The Company neither assumes nor authorizes any other person to assume for it, any other liability in connection with the sale of this equipment. This Warranty shall not apply to this equipment or to any part thereof which has been subjected to accident, negligence, alteration, abuse, or misuse.**

The Company makes no warranty whatsoever in respect to accessories or parts not supplied by the Company. The term "original Purchaser," as used in this Warranty, shall be deemed to mean that person for whom the equipment is originally supplied. This Warranty shall apply only within the boundaries of the continental United States.

Under this Warranty, the Company cannot guarantee that conditions existing beyond its control will not affect the Company's ability to obtain materials or manufacture necessary replacement parts.

The Company reserves the right to make design changes, or changes in specifications at any time, without any contingent obligation on the part of the Company to purchasers of machines and parts previously sold.

The Company warrants the construction of the equipment sold herein and will replace at the Company's expense for a period of one year from the date hereof, any parts which prove defective as determined under the terms of this Limited Warranty. High density, polyethelene floors are warranted for 20 years from cracking, rotting, splitting, or peeling.

## TRADEMARKS

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## SECTION 1: INTRODUCTION

### Guide to this Manual

This manual contains all the information necessary to safely assemble and operate the Millcreek 15 or 22 Spreader. Consult the Table of Contents for a detailed list of topics covered. You'll find this manual's step-by-step procedures easy to follow and understand. Should questions arise, please contact your Millcreek dealer before starting any of the procedures in this manual.

Regarding the information presented in this manual:

- All safety, operating, and servicing information reflects current production models at the time of publication of this manual.
- References made to left, right, front, and rear are those directions viewed when facing the unit from the rear.

*Please read all sections in the manual carefully--including the important safety information found in this section--before beginning any assembly/operation procedures; doing so ensures your safety and the optimal performance of your Millcreek Spreader.*

---

### For Your Safety...

For your safety, Millcreek documentation contains the following types of safety statements (listed here in order of increasing intensity):

- **NOTE:** A clarification of previous information or additional pertinent information.
- **ATTENTION:** A safety statement indicating that potential equipment damage may occur if instructions are not followed.



**CAUTION:** A safety statement that reminds of safety practices or directs attention to unsafe practices which could result in personal injury if proper precautions are not taken.



**WARNING:** A *strong* safety statement indicating that a hazard exists which can result in injury or death if proper precautions are not taken.



**DANGER!** *The utmost levels of safety must be observed;* an extreme hazard exists which would result in high probability of death or irreparable serious personal injury if proper precautions are not taken.

***The best operator is a careful operator.*** By using common sense, observing general safety rules, and adhering to the precautions specific to the spreader, you, the operator, can promote safe equipment operation.



## For Your Safety... (continued)

In addition to observing the specific precautions listed throughout the manual, **the following general precautions apply and *must be heeded* for proper, safe operation.**



**WARNING:** Keep hands and feet from under the spreader at all times. Ensure that you are safely distanced from any other persons before operating the spreader.



**WARNING:** DO NOT attempt to operate the spreader in areas with steep inclines, ditches, large rocks, stumps, or holes which may endanger the operator by upsetting the tractor or cause damage to the spreader.



**WARNING:** Never clean, adjust, or repair the spreader while the tractor is running.



**WARNING:** Never get off the tractor while it is in motion and/or the spreader is in operation.



**WARNING:** Never wear loose clothing when operating the spreader as it may become caught in the moving parts of the machine.



**WARNING:** Never allow children or anyone else to ride on the spreader.

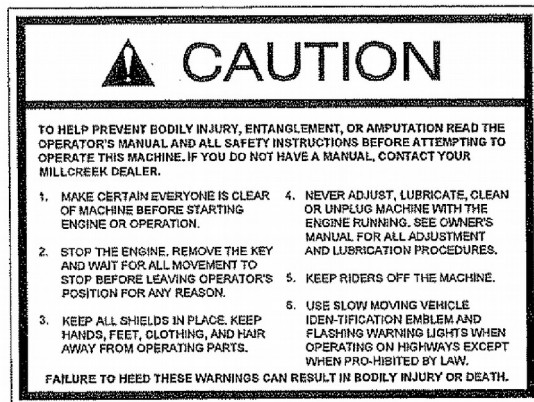
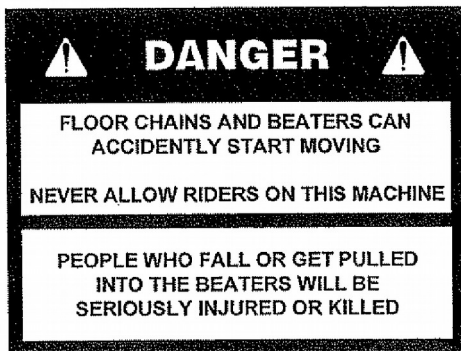


**WARNING:** To prevent injury and to promote safe spreader operation, keep all shields in place during operation. Ensure that all mounting hardware is properly tightened.

**ATTENTION:** For proper and safe operation of the spreader, periodically inspect all parts for excessive wear. Replace worn components with factory-authorized parts.

**ATTENTION:** DO NOT back up when the spreader is in unloading mode; doing so can cause the beater drive chain to jump off the sprocket (and may damage your spreader).

The following safety decals have been placed on your spreader to remind you of critical safety precautions which must be heeded for the personal safety of you, the operator, and any persons in the vicinity of the equipment while it is in operation. Be sure to keep the safety decals clean and readable. If the decals ever become damaged or illegible, contact your Millcreek dealer for replacements.



## SECTION 2: UNPACKING & ASSEMBLY

Before assembling your spreader, you must accomplish the following activities:

- Removing the shipping crate and inspecting all components
- Warranty registration

Assembly of the Millcreek Spreader is quick and easy. Most of the unit, with the exception of the hitch, has been pre-assembled at the factory. A procedure for assembling the hitch is provided in this section.

**NOTE:** If you ordered a spreader with the **endgate option**, this is also pre-assembled at the factory (no additional assembly required beyond what's covered in this section).

---

### Removing the Shipping Crate and Inspecting All Components

1. Carefully remove the top boards of the shipping crate.
  2. With the assistance of another person, carefully lift the spreader out of the shipping crate.  
**NOTE:** Approximate weight of the spreader is 200 pounds.
  3. The hitch assembly is packed inside the spreader. Note that the bolts for the hitch assembly/installation are already tightened on the brackets.
  4. Inspect the spreader to ensure that it has been shipped to you in a satisfactory manner.  
**NOTE:** Immediately notify the freight company and your Millcreek dealer in case of shipping damage, shortage(s), and/or errors.
  5. Locate all safety decals and review their content.
- 

### Warranty Registration

For proper warranty registration, Millcreek requires that you fill out the provided warranty registration card and return it *within 30 days* to:

MILLCREEK WARRANTY REGISTRATION  
Millcreek Manufacturing Company  
525 Reservoir Rd  
Honey Brook PA 19344

## Assembling the Hitch

1. Refer to Figure 2A.
2. Loosen the four (4) bolts on the front brackets (two on each side).
3. Position the legs of the hitch on the inside surface of the spreader front brackets, being sure to carefully align the pre-drilled holes as shown in Figure 2A.
4. Using the four bolts provided, secure the hitch to the front brackets. Tighten firmly.

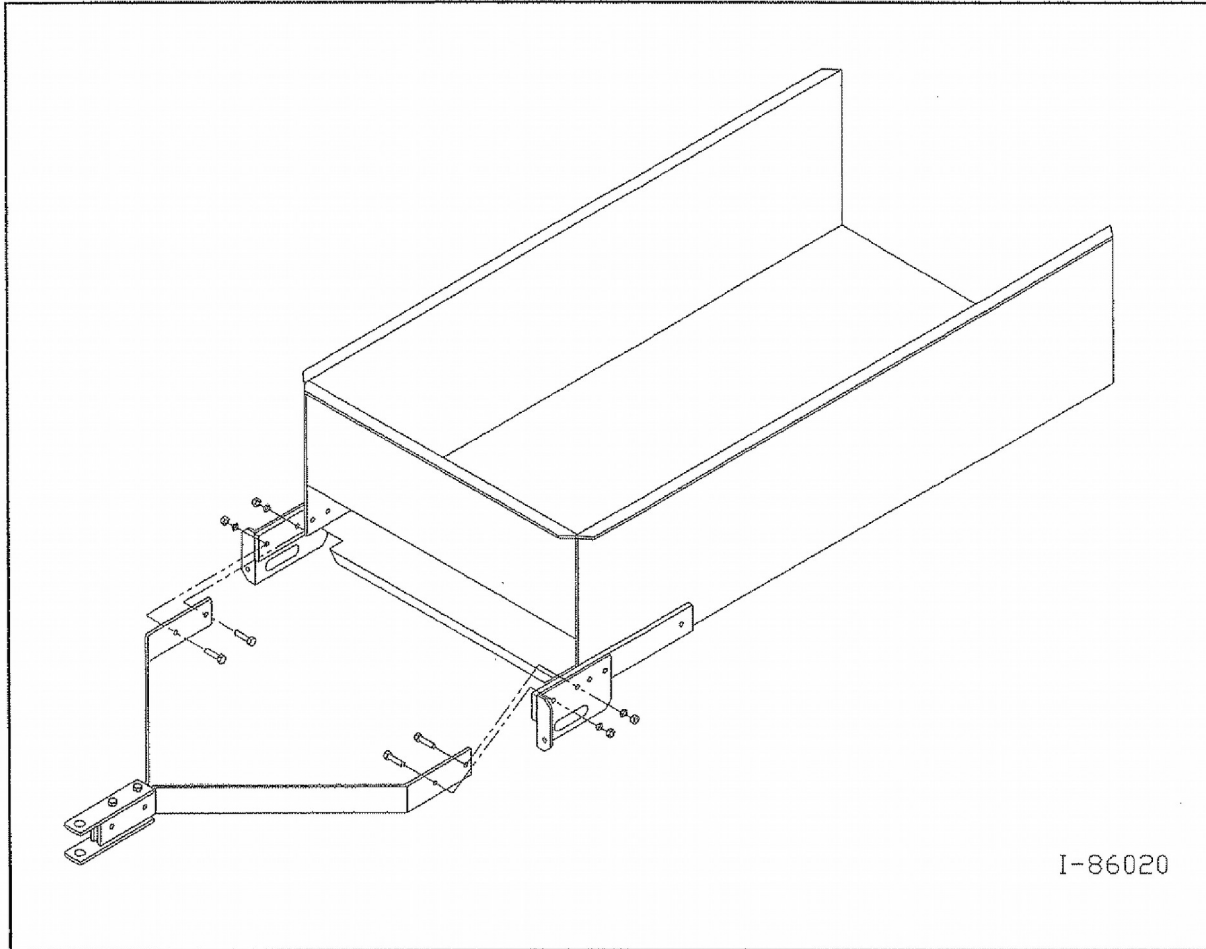


Figure 2A - Installing the Hitch on the Front of the Model 15 Spreader

## SECTION 3: OPERATION

### Understanding Spreader Operation

Proper and safe operation of the Millcreek Spreader requires: (1) being familiar with the spreader's operating components and (2) heeding all safety precautions as stated in this manual.

#### The Spreader Operating Components

By definition, the left and right sides of the spreader are determined while sitting on the tractor seat.

- The **lefthand spreader lever** *engages the floor apron chain which moves the manure to the rear of the spreader and into the beater.*
- The **righthand spreader lever** *engages the chain that drives the beater and spreads the manure.*

#### Guidelines for Loading the Spreader for Operation

- Millcreek recommends that you *load the spreader from the front toward the back* to facilitate easier unloading.
- NEVER store manure in the spreader between unloading times during critical cold weather months when a frozen load could result in severe equipment damage (i.e. torn conveyor chain).
- DO NOT store wet manure in the spreader (or keep the spreader outdoors with manure in it)--doing so will accelerate rusting of the steel.

---

### Operating the Spreader

**Before proceeding with operation of the spreader, review all safety statements as provided in Section 1 of this manual.**

**ATTENTION / CAUTION:** In order to obtain proper, aggressive spreading action, *the spreader ground speed must reach a minimum of 3.0 miles per hour--the equivalent of a comfortable walking pace.* (Note that the wheels drive the beater action.) However, spreading at speeds over 5.0 miles per hour (i.e. similar to a very brisk walking pace) can cause excessive wear or damage to the equipment.

1. Ensure that the spreader (and tractor) are not in motion (in a stopped position).
2. If you have a spreader with the endgate option, lift the endgate.
3. Engage the right lever for starting the beater.
4. Begin moving forward, and engage the left lever which starts the action of the apron floor chain (moving the material towards the rear of the spreader).
5. Ensure that you are reaching the optimal operating speed for spreading (at least 3.0 mph, but not more than 5.0 mph). Remember that this optimal speed is similar to a comfortable walking pace.

### Operating the Spreader (continued)

6. When the spreader is almost empty and there is very little manure pushing against the beater, disengage the right spreader lever (which controls the beater rotation).
7. Allow the apron chain to run the remaining manure out the back of the spreader.
8. When completely unloaded, disengage the left spreader lever to stop the action of the apron chain.

## SECTION 4: MAINTENANCE & ADJUSTMENT

### Guidelines for Regular Maintenance



**WARNING:** All shields must be replaced after maintenance or adjustment procedures are performed. Failure to do so could result in serious personal injury or death.

Performing regular maintenance on your Millcreek Spreader will help ensure optimal performance. Please follow these guidelines for maintaining your spreader:

- Clean the spreader after each use.
- Check the spreader each time it is used for loose, bent, broken or missing parts.  
**ATTENTION:** During operation, listen for abnormal sounds which might indicate loose parts or other equipment damage. Correct any parts problems immediately; expanded parts views of all spreader assemblies are provided in the Appendixes at the back of this manual.
- NEVER store manure in the spreader between unloading times during critical cold weather months when a frozen load could result in severe equipment damage (i.e. torn conveyor chain). Storing wet manure in the spreader (or keeping the spreader outdoors with manure in it) will accelerate rusting of the steel.

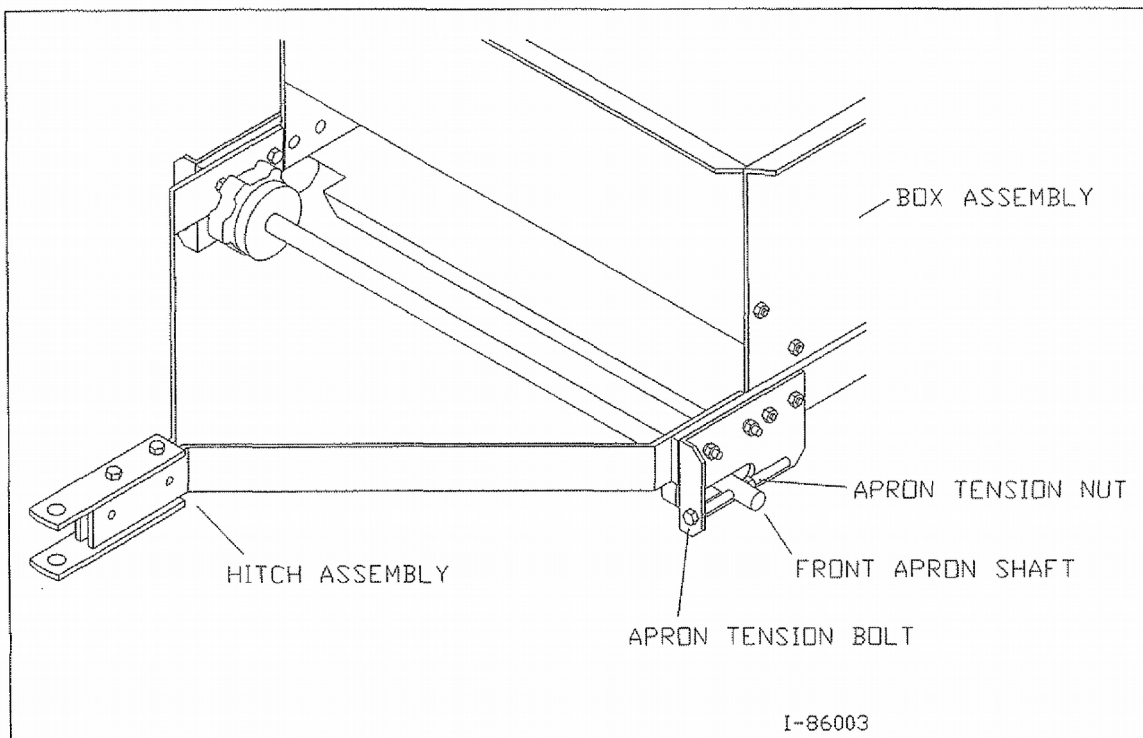


### Guidelines for Regular Maintenance (continued)

- Use a traction implement tire on the drive wheel.
- Apply chain lube once a month to the conveyor chain.
- Periodically check the conveyor chain for tension/tightness (refer to Figure 4B).

**Procedure for checking/adjusting the conveyor chain:**

- a) Pull up on the center slat of the conveyor chain.
- b) If you can lift it higher than 5 inches, the chain is too loose.
- c) If you can lift it no higher than 3 inches, the chain is too tight.
- d) If the chain needs adjustment, use two 7/16" wrenches to hold and loosen the Apron Tension Bolt and Apron Tension Nut, respectively (i.e. one wrench to hold the bolt, the other wrench to loosen the nut). Turn the nut clockwise or counterclockwise until correct tension/tightness is achieved. Repeat for the other side. *Make sure that the chains on each side of the conveyor are equally taut.*



**Figure 4B - Adjusting the Conveyor Chain for Proper Tension**

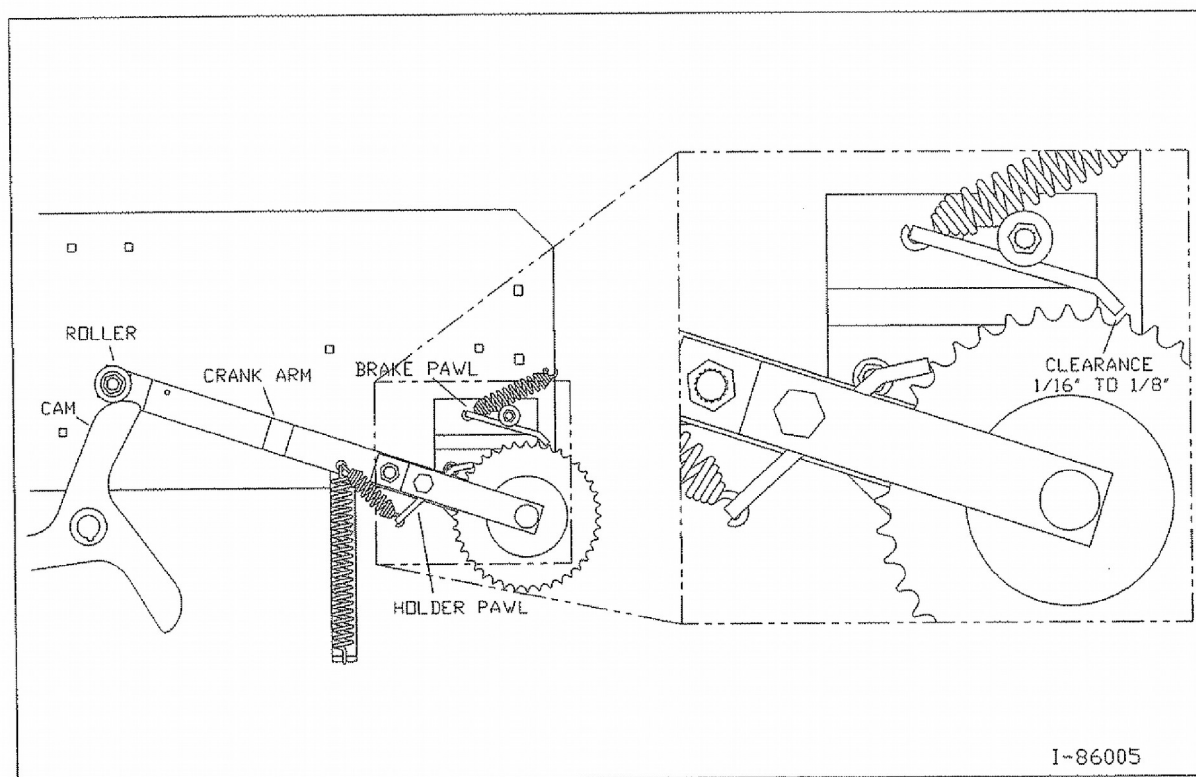
## Procedures for Spreader Adjustment

Problems with spreader operation may indicate that certain adjustments are required to restore proper functioning. The following procedures address common problems which may be encountered in spreader operation.

### Adjusting the Rear Pawl

If the conveyor chain is not moving, the most common cause is improper brake (rear) pawl adjustment. (by jacking up the lefthand drive wheel and turning the wheel by hand, you will be able to observe the brake pawl engagement in the sprocket teeth.)

1. Refer to Figure 4C.
2. Remove the shield covering the brake pawl assembly by removing the two (2) bolts, washers, and nuts holding it in place.
3. Loosen the nut behind the brake pawl using a 9/16" wrench.
4. With the roller positioned at the highest point on the star cam, tap the brake pawl up or down as necessary to attain a 1/16" to 1/8" clearance between the brake pawl and the sprocket tooth (see close-up detail in Figure 4C).
5. After the desired adjustment is achieved, re-tighten the rear nut.
6. Replace the safety shield.



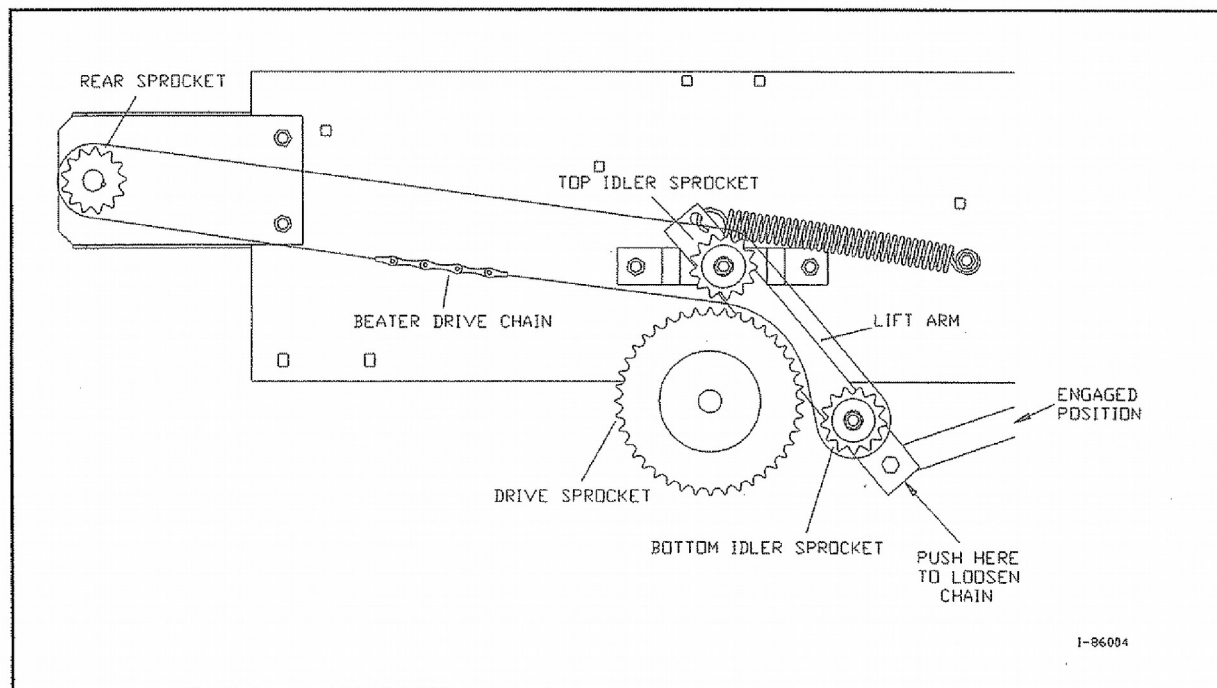
**Figure 4C - Adjusting the Rear Brake Pawl**

## Procedures for Spreader Adjustment (continued)

### Re-installing the Beater Drive Chain

Backward motion (backing up) with the spreader engaged will most probably cause the beater drive chain to come off the rear sprocket. The following procedure explains how to re-install the chain should this ever become necessary.

1. Disconnect the spreader from the tractor.
2. Jack up and secure the right side of the spreader.
3. Remove the right wheel by removing the four (4) bolts, washers, and nuts.
4. Remove the right safety shield by removing the three (3) bolts, washers, and nuts.
5. Engage the lever for the beater drive chain into unloading mode.
6. Refer to Figure 4D. Re-install the chain on the rear sprocket.
7. Re-install the chain over the large drive sprocket.
8. Re-install the chain around the bottom idler sprocket.
9. Re-install the chain over the top idler sprocket by pushing the lift arm as shown. Ensure that the chain is positioned properly as shown in Figure 4D.
10. Re-install the safety shield and right wheel.



**Figure 4D - Beater Drive Chain Installed in the Proper (Engaged) Position**



## APPENDIX A: PARTS REFERENCE

The following information is provided for your reference in understanding how the spreader is assembled and how spare parts can be identified and ordered properly.

### General Spreader Specifications

	Model 15	Model 22
Capacity, struck	6.4 cubic ft.	13 cubic ft.
Capacity, heaped	8.8 cubic ft.	16.2 cubic ft.
Body Length	46 inches	60 inches
Body Width	24 inches	
Body Height	11 inches	16.5 inches
Overall Length	84 inches	98 inches
Overall Width	42 inches	
Overall Height	21 inches	26.5
Construction	All steel	
Body Finish	Galvanized	
Apron Chain	#55 Steel Detachable	
Tires*	4.00-8 traction tire	
Beater Bearings	Sealed ball bearings	
Beater Drive	#40 roller chain	
Apron Drive	Ratchet	
Weight (with tires)	200 lbs.	250 lbs
Tractor Size (weight required)	8 Hp	10 Hp

## Ordering Information

When ordering replacement parts, please provide the following information to your local Millcreek dealer:

- Model and Serial Number of the unit (located on the front right corner of the spreader)
- Part Number and Description as it appears on the following drawings/parts lists

## Spreader Box Assembly

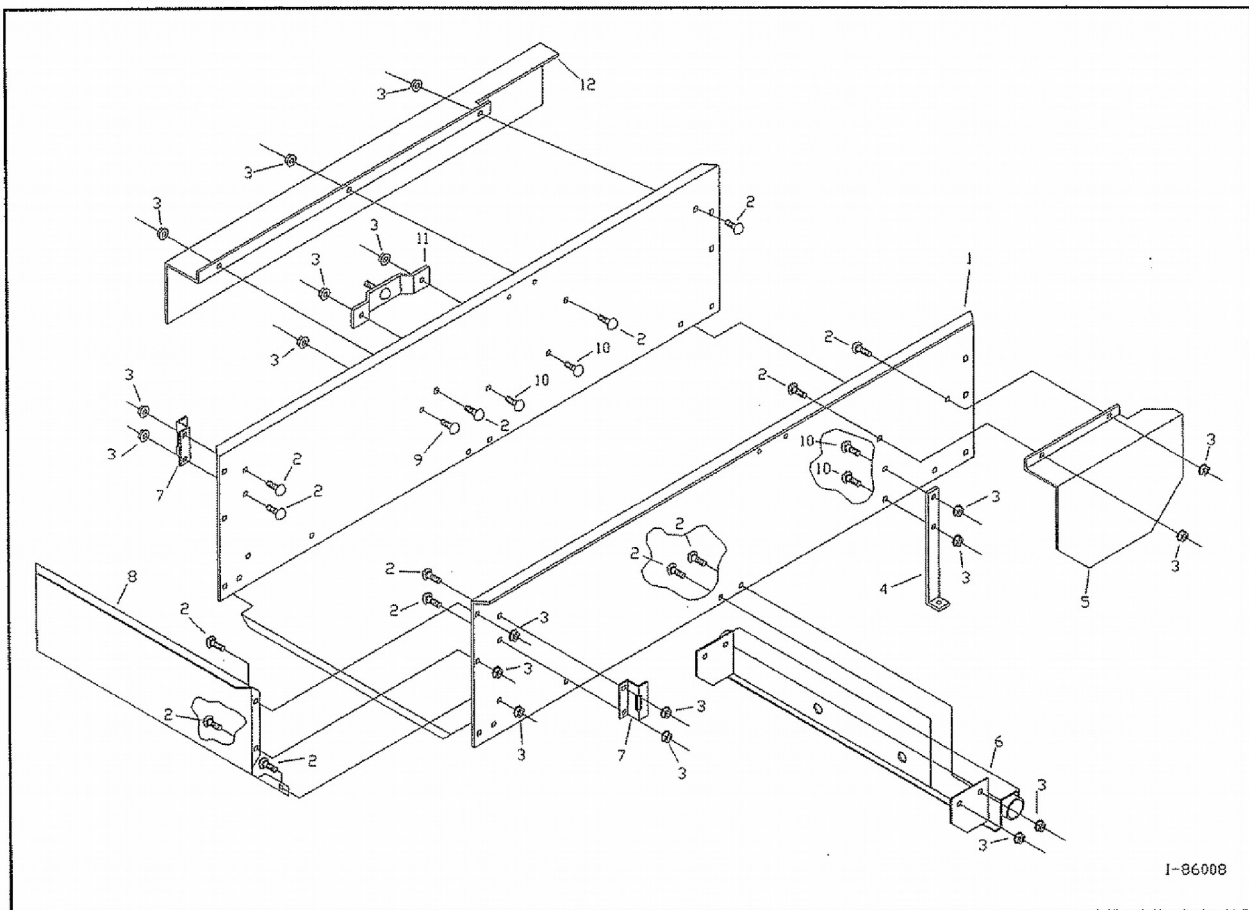


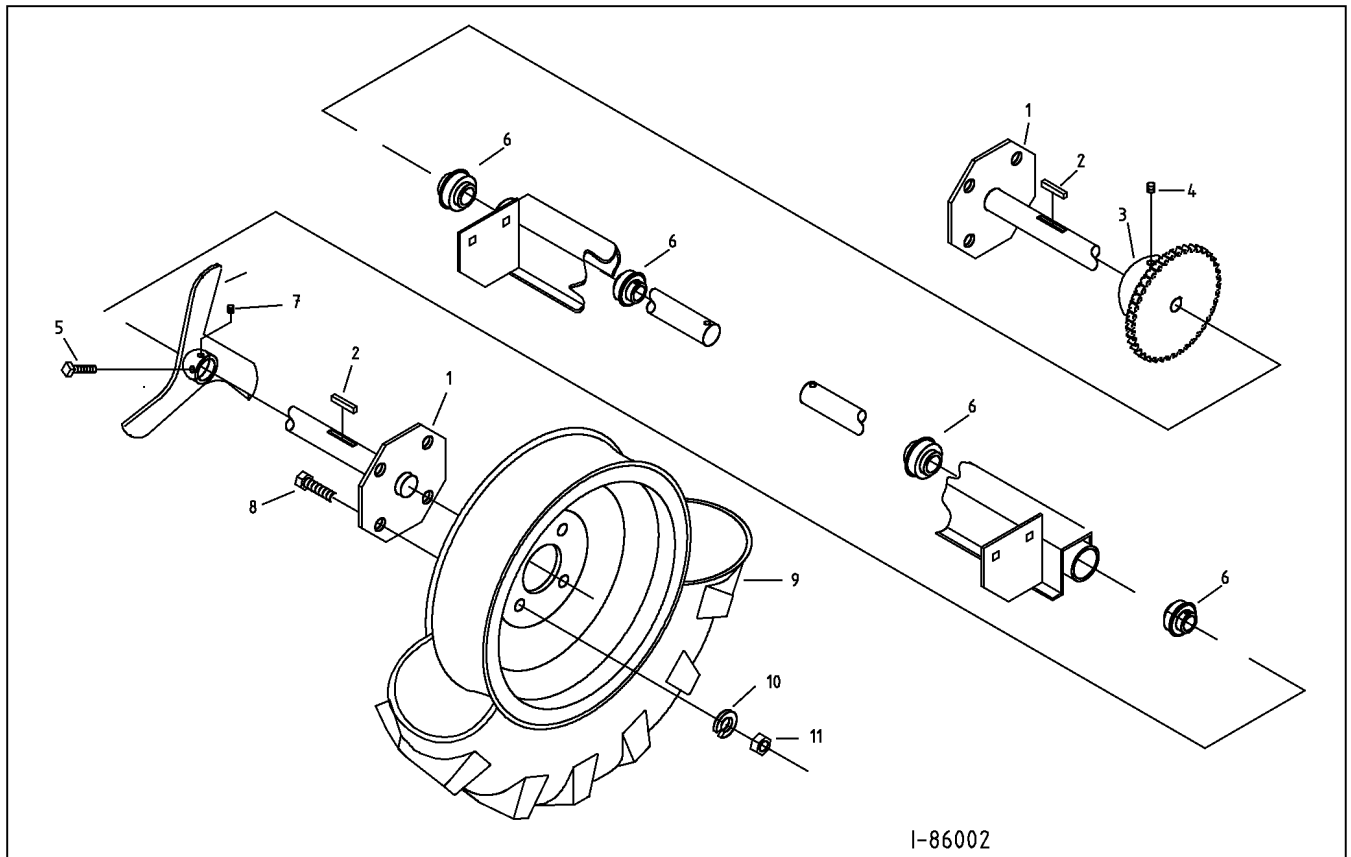
Figure A1 - Spreader Box Assembly Parts Detail



### Spreader Box Assembly (continued)

<u>Item #</u>	<u>Millcreek Part #</u>	<u>Qty.</u>	<u>Component Description</u>
1	260876	1	Model 15 Spreader Box
2	34337	19	5/16 x 1/2 Carriage Bolt
3	34099	24	5/16 Flange Nut
4	260873	1	Ratchet Spring Bracket
5	260875	1	Ratchet Shield
6	260937	1	Model 15 Axle
7	260874	2	Disengage Catch
8	260877	1	Model 15 Front
9	34275	1	5/16 x 1 Carriage Bolt
10	34274	4	5/16 x 3/4 Carriage Bolt
11	260951	1	Sprocket Mount
12	260870	1	Beater Drive Shield
1	261979	1	Model 22 Spreader Box
8	261980	1	Model 22 Front
13	262003	1	Model 22 Rear Bar

## Axle and Wheel Assembly



**Figure A2 Axle and Wheel Assembly Parts Detail**

**NOTE:** The spreader tires are mounted in reverse of the "normal" installation.

**Axle and Wheel Assembly (continued)**

<u>Item #</u>	<u>Millcreek Part #</u>	<u>Qty.</u>	<u>Component Description</u>
1	260943	2	Axle Shaft
2	210130	2	1/4 x 1 Key
3	210209	1	40 Tooth Sprocket (includes item #4)
4	34325	3	5/16 x 5/16 Set Screw
5	34290	1	5/16 x 3/4 Square Head Set Screw
6	210329	4	Axle Bearing
7	260942	1	Model 15 Cam (includes item #4)
8	34311	8	1/2 x 1 1/4 Bolt
9	215154	1	Model 15 Left Wheel and Tire
	215284	1	Model 15 Right Wheel and Tire
10	34035	8	1/2 Lock Washer
11	34034	8	1/2 Nut

## Hitch Assembly and Spreader Controls

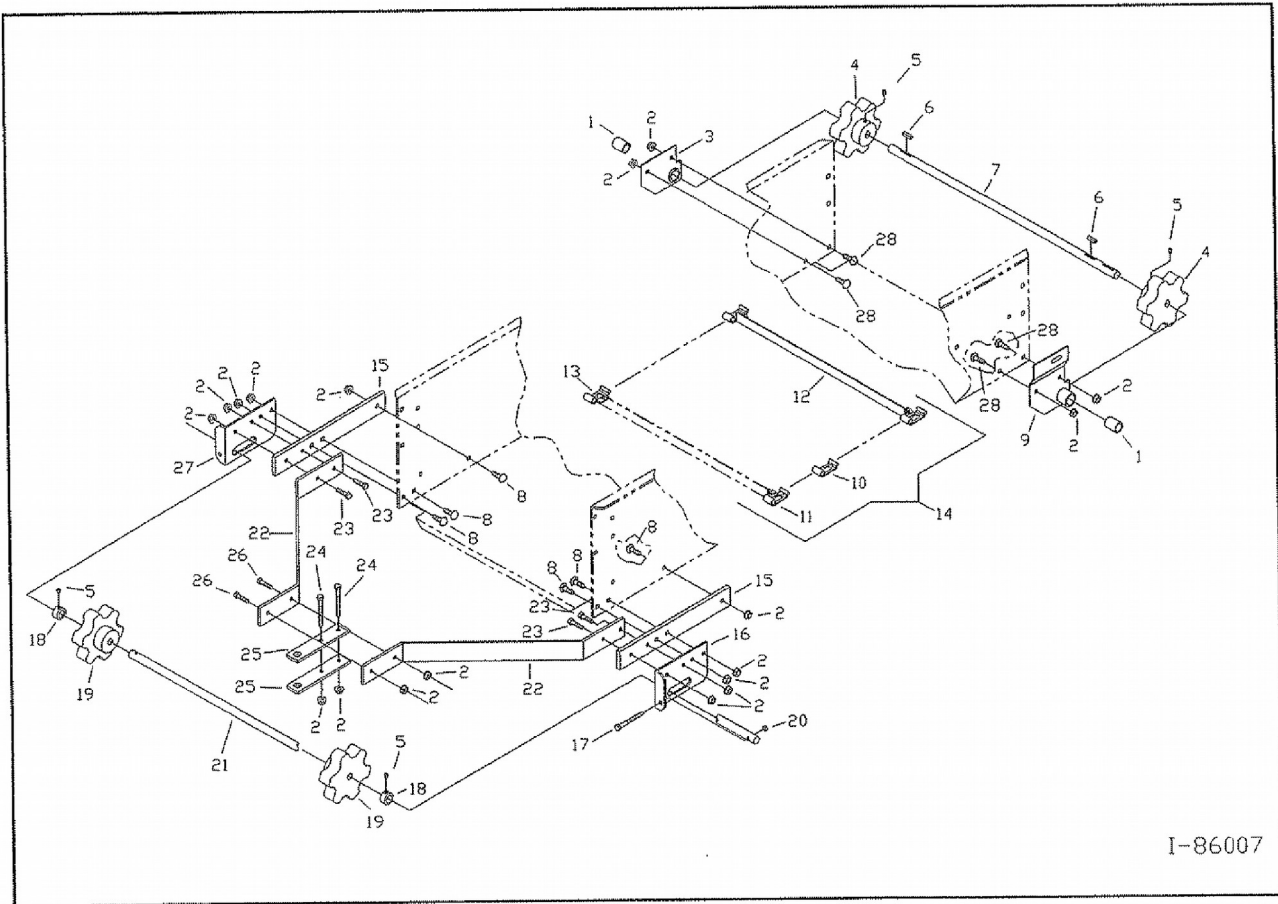


Figure A3 - Hitch Assembly and Controls Parts Detail

## Hitch Assembly and Spreader Controls (continued)

<u>Item #</u>	<u>Millcreek Part #</u>	<u>Qty.</u>	<u>Component Description</u>
1	210110	2	Bushing
2	34099	18	5/16 Flange Nut
3	260945	1	Right Apron Bearing (includes item #1)
4	210111	2	Sprocket (includes item #5)
5	N/A	4	5/16 x 5/16 Set Screw
6	210129	2	3/16 x 1 Key
7	260948	1	Apron Shaft
8	34274	6	5/16 x 3/4 Carriage Bolt
9	260946	1	Left Apron Bearing (includes item #1)
10	210238	112	Model 15 Apron Link (#55 steel detachable)
11	210237	8	Attachment Link
12	260972	8	Slat, Attach Link Assembled (includes items #11 and #13)
13	210236	8	Attachment Link
14	260944	1	Apron Slat Assembly (includes items #10 and #12)
16	261981	1	Left Apron Tightener Bracket
17	34277	2	1/4 x 4 Bolt
19	220167	2	Idler Sprocket
20	34124	2	1/4 Lock Nut
21	260952	1	Apron Idler Shaft
22	260852	2	Hitch Bracket
23	34328	4	5/16 x 1 Flange Bolt
24	34276	2	5/16 x 3 Bolt
25	260853	2	Hitch Clevis
26	34222	2	5/16 x 1-1/4 Bolt
27	261982	1	Right Apron Tightener Bracket
28	34337	4	5/16 x 1/2 Carriage Bolt
14	261986	1	Model 22 Apron Chain

## Conveyor Chain Assembly

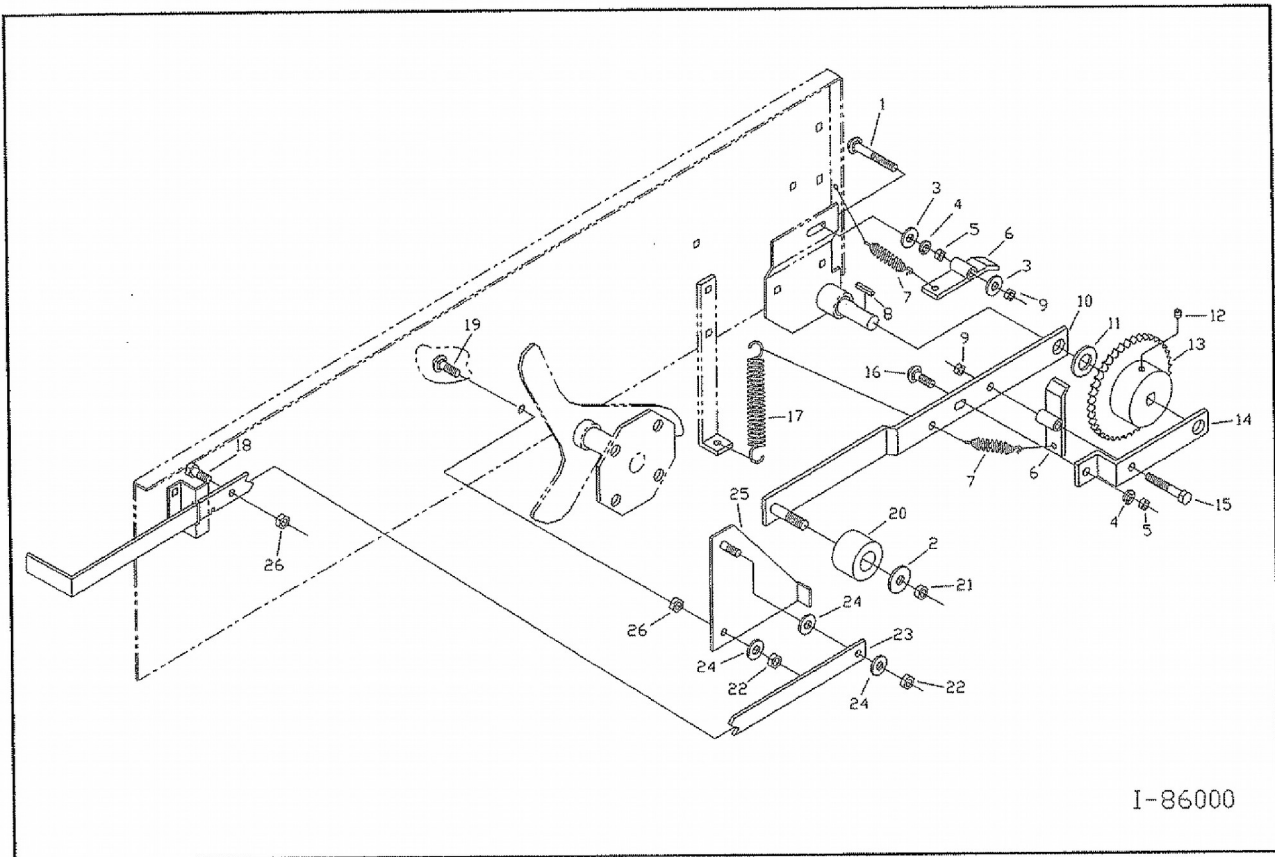


Figure A4 - Conveyor Chain Assembly Parts Detail



**Conveyor Chain Assembly (continued)**

<u>Item #</u>	<u>Millcreek Part #</u>	<u>Qty.</u>	<u>Component Description</u>
1	34219	1	3/8 x 2-1/2 Carriage Bolt
2	34094	1	1/2 Washer
3	34018	2	3/8 Washer
4	34141	2	3/8 Lock Washer
5	34087	2	3/8 Nut
6	261380	2	Pawl
7	220104	2	Pawl Spring
8	210129	1	3/16 x 1 Key
9	34095	2	3/8 Lock Nut
10	260947	1	Long Crank Arm
11	34201	1	3/4 SAE Washer
12	N/A	2	5/16 x 5/16 Set Screw
13	261748	1	40 Tooth Sprocket (includes item #12)
14	260196	1	Short Crank Arm
15	34219	1	3/8 x 2-1/4 Bolt
16	34006	1	3/8 x 1 Carriage Bolt
17	220138	1	Ratchet Spring
18	34328	1	5/16 x 3/4 Flange Bolt
19	34275	1	5/16 x 1 Carriage Bolt
20	261050	1	Cam Roller
21	34198	1	1/2 Lock Nut
22	34223	2	5/16 Lock Nut
23	260871	1	Apron Lever
24	34057	3	5/16 Washer
25	260868	1	Lift Arm Guide
26	34099	2	5/16 Flange Nut
23	261983	1	Model 22 Apron Lever

## Beaters and Drive Assembly

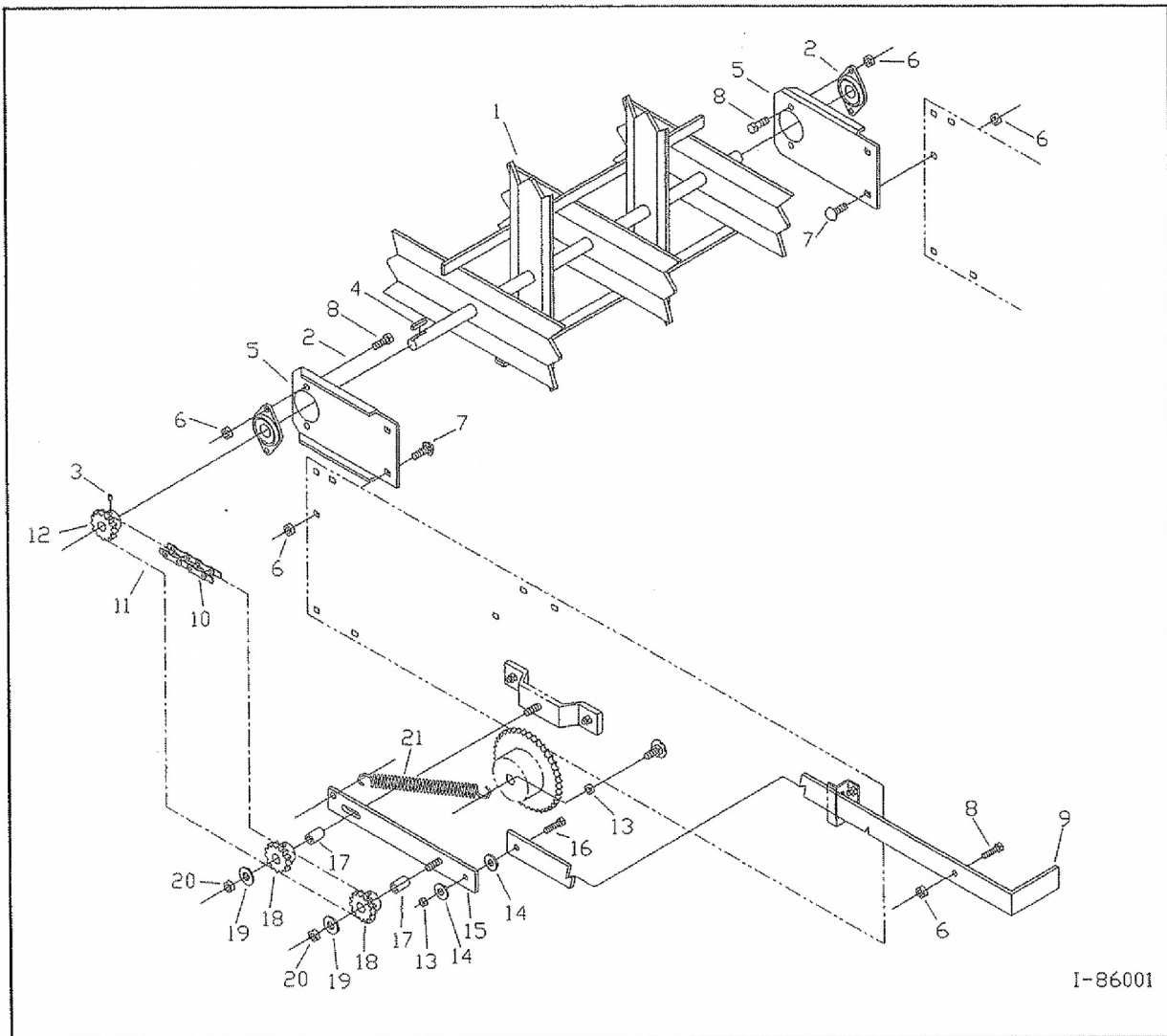


Figure A5 - Beaters and Drive Assembly Parts Detail

**Beaters and Drive Assembly (continued)**

<u>Item #</u>	<u>Millcreek Part #</u>	<u>Qty.</u>	<u>Component Description</u>
1	260902	1	Beater
2	210106	2	3/4" Spherical Ball Bearing
3	N/A	2	1/4 x 3/8 Set Screw
4	210129	1	3/16 x 1 Key
5	260855	2	Beater Bracket
6	34099	9	5/16 Flange Nut
7	34337	4	5/16 x 1/2 Carriage Bolt
8	34328	5	5/16 x 3/4 Flange Bolt
9	260872	1	Beater Lever
10	210328	1	Connector Link (#40 Roller Chain)
11	210208	1	Beater Chain (#40 RC x 84 Links) (includes item #10)
12	210123	1	13 Tooth Sprocket (includes item #3)
13	34223	2	5/16 Lock Nut
14	34057	2	5/16 Washer
15	260971	1	Lift Arm
16	34221	1	5/16 x 1 Bolt
17	210103	2	Bushing
18	260345	2	13 Tooth Sprocket (includes item #17)
19	34018	2	3/8 Washer
20	34095	2	3/8 Stover Lock Nut
21	220105	1	Spring
9	261984	1	Model 22 Beater Lever

## Optional Endgate Assembly

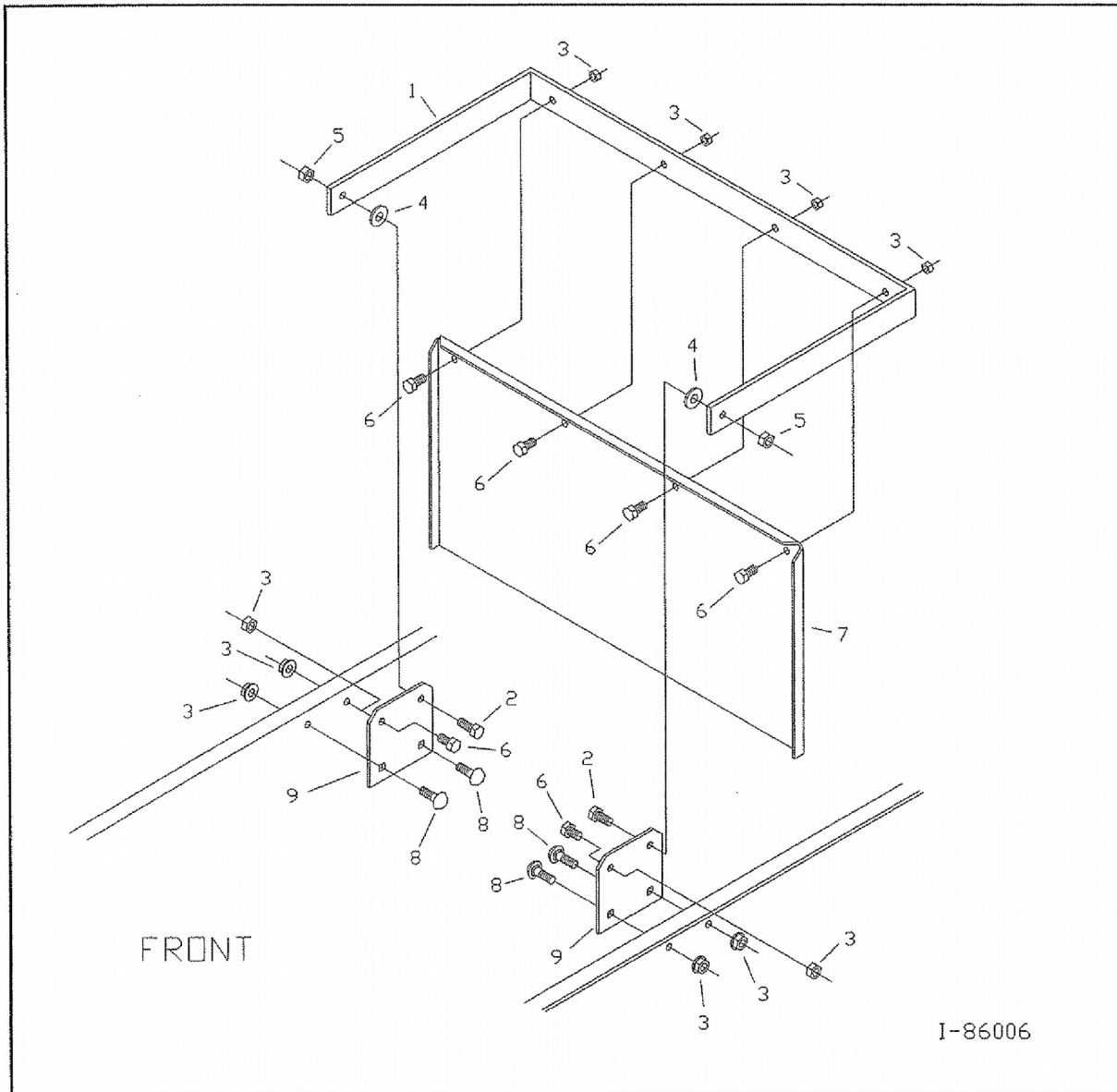


Figure A6 - Optional Endgate Assembly Parts Detail

### Optional Endgate Assembly (continued)

<u>Item#</u>	<u>Millcreek Part#</u>	<u>Qty.</u>	<u>Component Description</u>
1	260850	1	Endgate Frame
2	34336	2	5/16 x 1 Flange Bolt
3	34099	10	5/16 Flange Nut
4	34057	2	5/16 Washer
5	34223	2	5/16 Lock Nut
6	34328	6	5/16 x 3/4 Flange Bolt
7	260849	1	Endgate
8	34274	4	5/16 x 3/4 Carriage Bolt
9	260851	2	Pivot Plate

