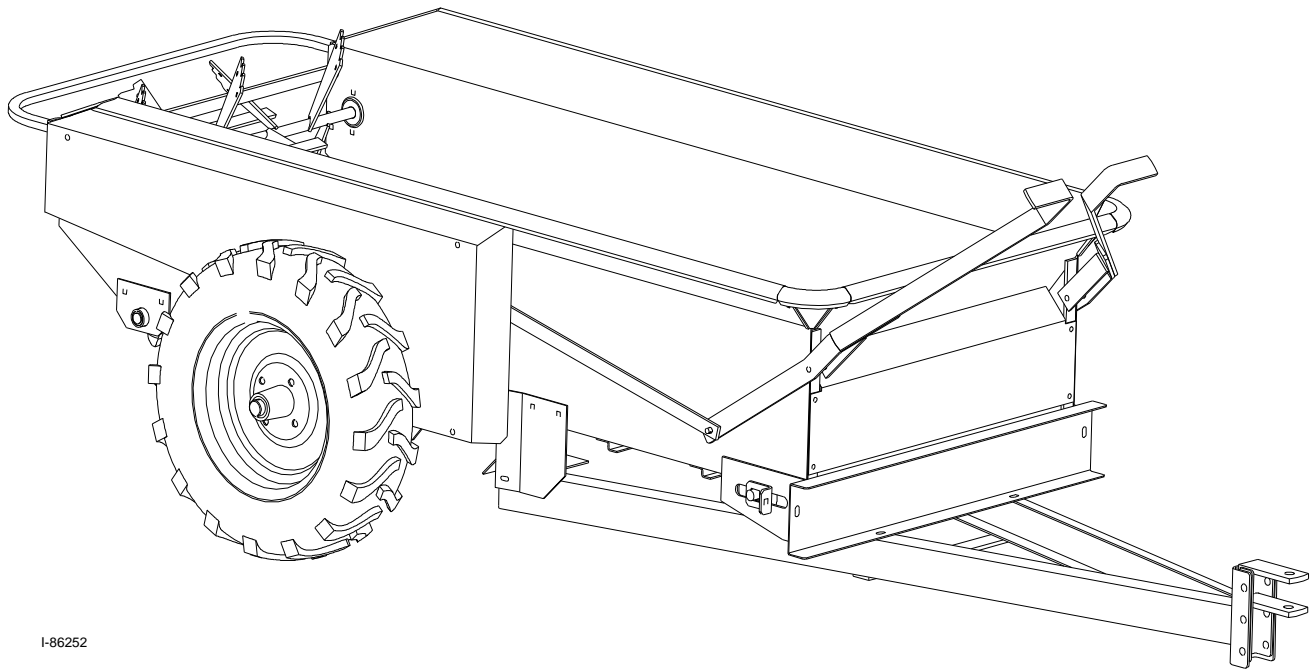


OPERATOR'S MANUAL

**MILLCREEK MODELS:
27ss and 37ss Spreaders**



I-86252

PUBLICATION DATE: 3/1/14, Rev. 1

MILLCREEK PART # 43831S5

Sold by Cashmans: (740) 363-6073
www.cashmans.com
Millcreek Manufacturing Company
525 Reservoir Road
Honey Brook PA 19344



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 three 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 **three years** from the date hereof, any parts which prove defective as determined under the terms of this Limited Warranty. The high density polyethelene floors are warranted for the life of the machine from cracking, rotting, splitting, or peeling. The body (or box) of the spreader is warranted for the life of the machine against rust corroding through the side walls of the body. Stains are not covered under this warranty.

TRADEMARKS

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SECTION 1: INTRODUCTION

Guide to this Manual

This manual contains all the information necessary to safely operate and maintain the Millcreek 27ss or 37ss 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.

NOTE: Procedures provided in this manual apply to both spreader models (Model 27ss and Model 37ss) unless specifically noted otherwise.

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



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 while 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.

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

ATTENTION: To prevent the hitch from coming disconnected during operation, use the proper size hitch pin with a safety cotter at all times.

Safety Labels

Following are the locations and descriptions of all labels on the spreader (labels are identical for both Models 27ss and 37ss); refer to Figure 1A. Please note that some labels denote model number, model description, etc. while others contain important safety messages.

Each **Safety Label** contains an important safety message starting with a key word as discussed earlier in this section (e.g. ATTENTION, CAUTION, WARNING, DANGER). For your safety and the safe operation of your equipment, review all labels and heed all safety messages as printed on the labels.

Be sure to keep the safety labels clean and readable. If the labels ever become damaged or illegible, contact your Millcreek dealer for replacements.

Safety Labels (continued)

Spreader Safety Labels

<u>Label Part #</u>	<u>Description</u>
42792	DANGER - NO riders
42710	WARNING - Flying Debris
42756	WARNING - Entanglement, Do NOT operate without shields
42772	WARNING - Spreader combination safety label - moving parts, read manual
42814	ATTENTION - Do NOT exceed specified speed
42700	Millcreek Logo Label
42815/42816	Spreader Serial Number Label
42854/42855	Spreader Model Number Label

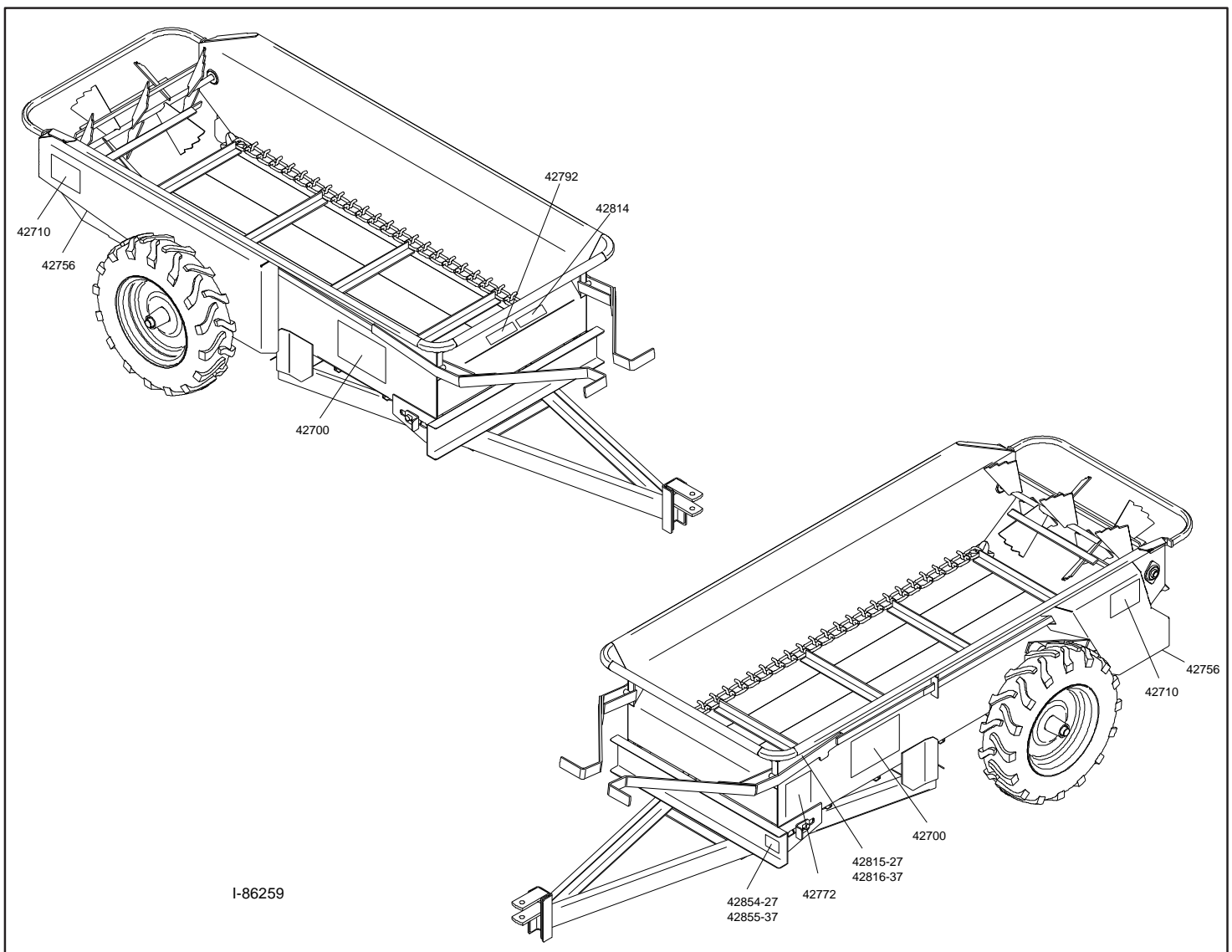



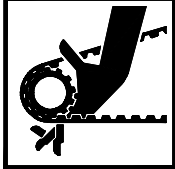
Figure 1A - Spreader Safety Label Locations

For your safety, be sure to locate all safety labels and review their content before proceeding with operating the spreader!


Safety Labels (continued)


 **DANGER** **NO RIDERS** 42792

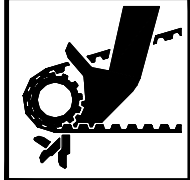
 **WARNING**
Entanglement Hazards

 **Moving parts can crush or cut.**
STAY CLEAR of machine while engine is running and/or machine is operating. Keep hands, feet, clothing, and hair away from operating parts.

 **Never adjust, lubricate, or clean machine while engine is running and/or machine is operating.**
Never operate machine without safety shields in place.

 **Read and understand** operator's manual and safety labels before operating or servicing the machine.
Failure to follow these warnings may result in serious injury or death. 42772

 **WARNING**



Entanglement Hazard.
DO NOT OPERATE without safety shield in place. Moving parts can crush and cut. 42756

 **WARNING**




Entanglement / Flying Debris Hazards.
DO NOT STAND in back of machine while engine is running and/or machine is operating. Rotating beaters and/or flying debris can cause serious personal injury or death.
Approach the rear of the machine ONLY when all power sources are shut OFF and all moving parts have stopped. 42710

Do Not Exceed 5 MPH While Spreading 42814

Inspection and Warranty Registration

Most spreader models are shipped from your Millcreek Dealer completely assembled and ready for operation. Inspect your new spreader thoroughly upon receipt to ensure that it has been shipped to you in a satisfactory manner and includes all of the features/options as ordered. Immediately notify the freight company and your Millcreek dealer in case of shipping damage, shortage(s), and/or errors.

NOTE: If the spreader has not been pre-assembled, please refer to the **Supplemental Assembly Instructions**. Please contact your local Millcreek Dealer for assistance as needed.

Following inspection of your new spreader, locate the Millcreek Warranty Card in the literature packet shipped with your spreader. For proper warranty registration, Millcreek requires that you fill out the warranty registration card and return it *within 30 days* to:

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

SECTION 2: OPERATION

Understanding Spreader Operation

Proper and safe operation of the Millcreek 27ss/37ss 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 following operating components are included with all Model 27ss/37ss spreaders:

- 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.*

The following are optional operating components included with some Model 27ss/37ss spreaders (depending on the specific model configuration ordered):

- The **dollywheel/jack** allows easy movement of the spreader around the stable or barn; also adjusts the height of the spreader to facilitate hook-up to the spreader towing vehicle.
- The **endgate** helps to contain loads between spreading and also shields the operator during spreading.

Connecting the Spreader to the Towing Vehicle

For operation in the field, the Millcreek Model 27ss/37ss spreaders can be towed by a number of vehicles-- garden tractor, ATV, or utility vehicle. Please adhere to the following procedure for connecting the spreader to your towing vehicle. **Attaching the spreader to the towing vehicle as instructed is necessary for safe and proper operation of the equipment.**

1. Back the towing vehicle within a few inches of the spreader hitch.
2. Refer to Figure 2A. Determine the spreader hitch position required to allow the spreader to remain parallel to the ground with relation to the towing vehicle.
NOTE: As shown in Figure 2A, the adjustable hitch on the front of the spreader may be positioned in a number of ways, by sliding up/down or inverting, to achieve a higher or lower positioning of the spreader hitch.
3. Re-position the adjustable hitch as required and tighten the two (2) 1/2" bolts and lock nuts securely.

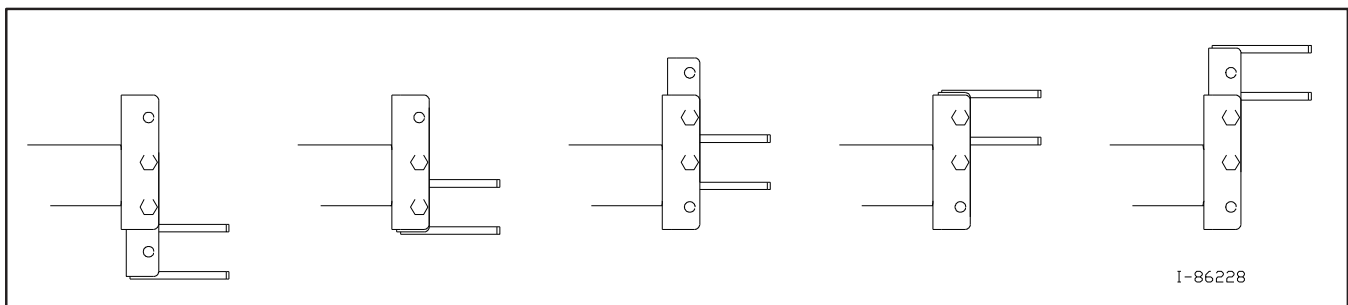


Figure 2A - Adjusting the Hitch Position

Attaching the Spreader to the Towing Vehicle (continued)

4. Refer to Figure 2B. Adjust the overall height of the spreader/hitch with the dollywheel/jack so the height of the spreader hitch matches the height of the tractor drawbar or vehicle hitch point (as applicable).

NOTE: The dollywheel/jack is held in its upright position with a spring-loaded pin. To release the jack to move it into its operational position, simply pull the pin outward and swing the jack down.

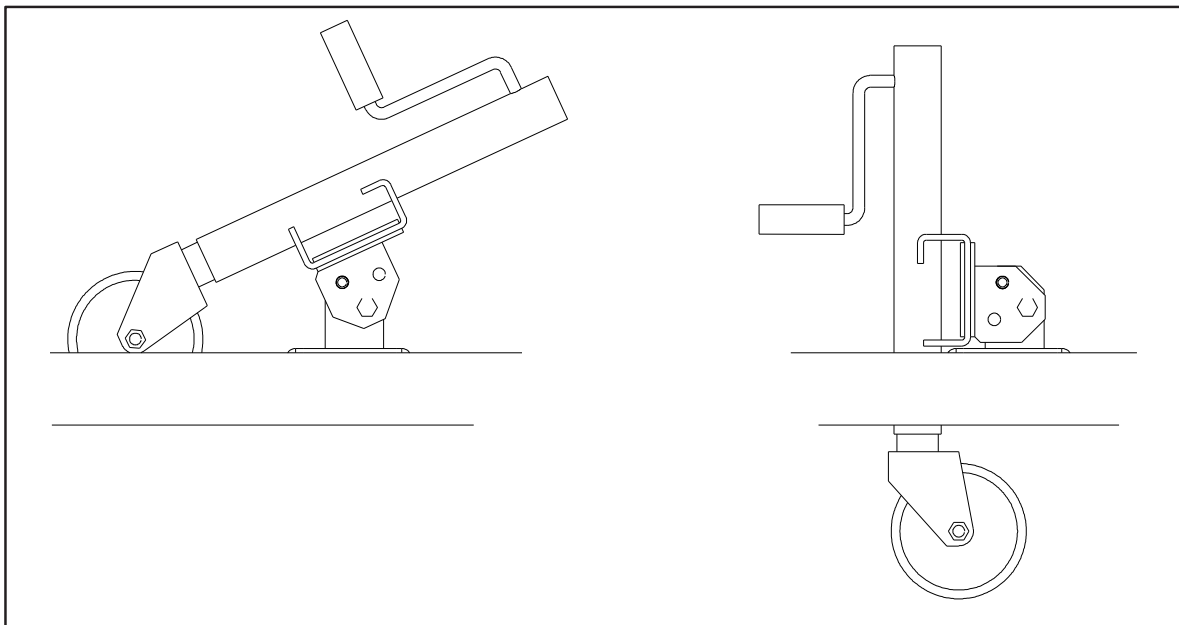



Figure 2B - Using the Dollywheel/Jack

5. Back the towing vehicle into the hitch until the holes of the spreader hitch line up with the vehicle hitch point.
 6. Fasten the spreader hitch to the vehicle drawbar/hitch point with a hitch pin that fits securely (i.e. so that it will not come out during spreader operation) and lock in place with the safety clip.
-  **WARNING:** Damage to the spreader or other vehicle, as well as injury to the operator, may occur if a properly-sized hitch pin is not installed as recommended. Note that the installation of the safety clip to hold the hitch pin in place is also required for safe spreader operation.
7. Remove the weight from the dollywheel/jack by lowering the spreader hitch on the vehicle drawbar/hitch point.
 8. To provide adequate ground clearance for operation, swing the dollywheel/jack up into its resting position (i.e. pull the spring-loaded pin out to release the jack and swing the jack upward, then allow the pin to re-engage to hold the jack in its upward position.)

Guidelines for Loading the Spreader for Operation

- Millcreek recommends that you **load the spreader from the front toward the back** to facilitate easier unloading.
- **ATTENTION:** 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 floor apron chain).

Operating the Spreader

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



WARNING: To prevent serious personal injury, ensure that ALL safety shields are in place on the spreader before starting operation. NEVER operate the spreader without ALL safety shields in place.

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, which may void your warranty.

1. Ensure that the spreader (and towing vehicle) are in a stopped position (i.e. NOT in motion).
2. Lift the manual endgate. (*Optional equipment*)
3. Engage the right lever to start the beater.
4. Engage the left lever to start the action of the apron floor chain (moving the material towards the rear of the spreader).
5. Begin moving forward, and 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.
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.
9. If your spreader is equipped with a manual endgate, return the endgate to the closed (down) position.
10. Refer to Section 3 in this manual for maintenance to be performed following operation of the spreader.

IMPORTANT! After a few hours of initial operation, watch and listen for any loose components. **Be aware that it may be necessary to re-tighten hitch hardware and/or wheel bolts; please refer to Section 3 in this manual for the proper torque specifications.**

SECTION 3: 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 once a week and before storing the unit for an extended period of time.
ATTENTION: 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 floor apron chain).
- 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.

ATTENTION: For safe and proper operation of the spreader, adhere to the following specifications for tightening the **HITCH HARDWARE**; failure to tighten all hitch hardware securely may result in equipment damage.

<u>Hitch Hardware*</u>	<u>Torque Specification</u>
3/8"	25 ft. lbs.
5/16"	15 ft. lbs.

***Note that these torque specifications apply to the hitch members fastened to the spreader box, NOT to the adjustable hitch prong bracket at the front of the hitch.**

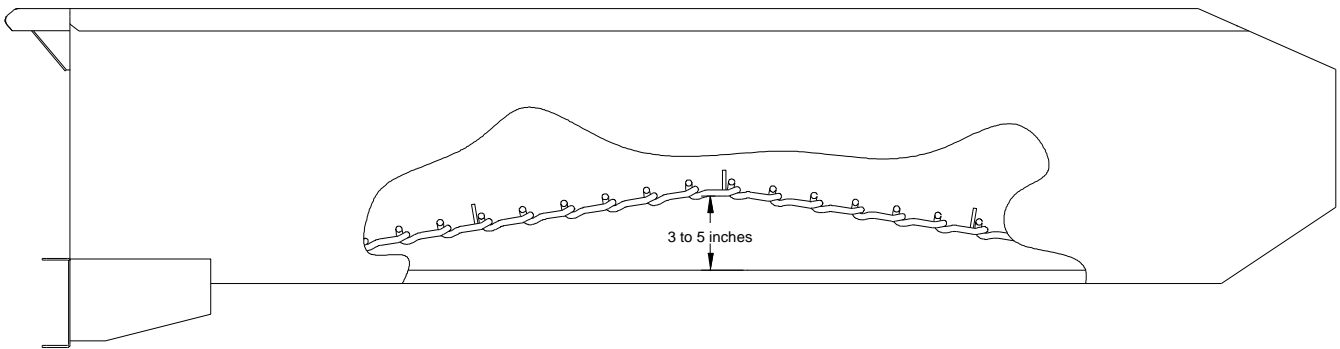
- Check that implement tires have adequate air pressure (28 psi). Always use ag-traction implement tires on the drive wheels. Wheel bolts should be torqued to 60 ft. lbs.
- Apply chain lube once a month (or as needed) to the drive chains (shown in Figure 3D); use vegetable oil or a common spray lube for chains.

Guidelines for Regular Maintenance (continued)

- Periodically check the floor apron chain for tension/tightness (refer to Figure 3A).

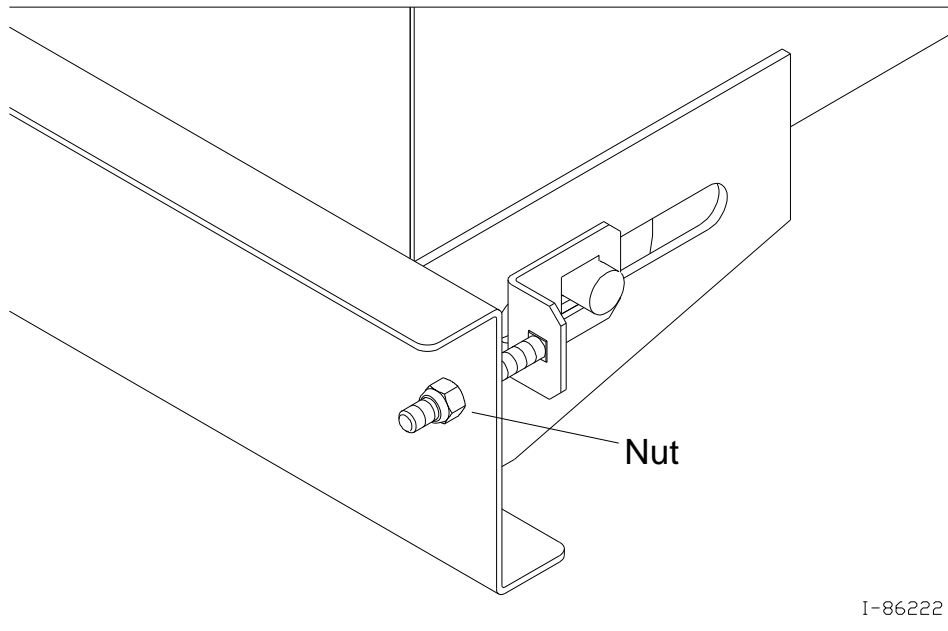
Procedure for checking/adjusting the floor apron chain:

- a) Pull up *firmly* on the center slat of the floor apron chain.
NOTE: The force required to adequately pull up on the apron chain to determine the tension measures approximately 30 lbs.
- b) If you can lift it *higher* than five (5) inches, the chain is too loose.
- c) If you can lift it *not higher* than three (3) inches, the chain is too tight.
- d) If the chain needs adjustment, turn the front nut clockwise or counterclockwise until correct tension/tightness is achieved. (See Figure 3B.) Repeat for the other side. **Make sure that the chains on each side of the apron are equally taut.**



I-86261

Figure 3A - Checking for Proper Tension on the Floor Apron Chain



I-86222

Figure 3B - Adjusting the Floor Apron Chain

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 floor apron chain is not moving, the most common cause is improper brake (rear) pawl adjustment.

NOTE: By engaging both side drives and turning the beater by hand, you will be able to observe the brake pawl engagement in the sprocket teeth.

1. Refer to Figure 3C.
2. Remove the shield covering the brake pawl assembly by removing the two (2) 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 3C).
5. After the desired adjustment is achieved, re-tighten the rear nut.
6. Replace the safety shield.

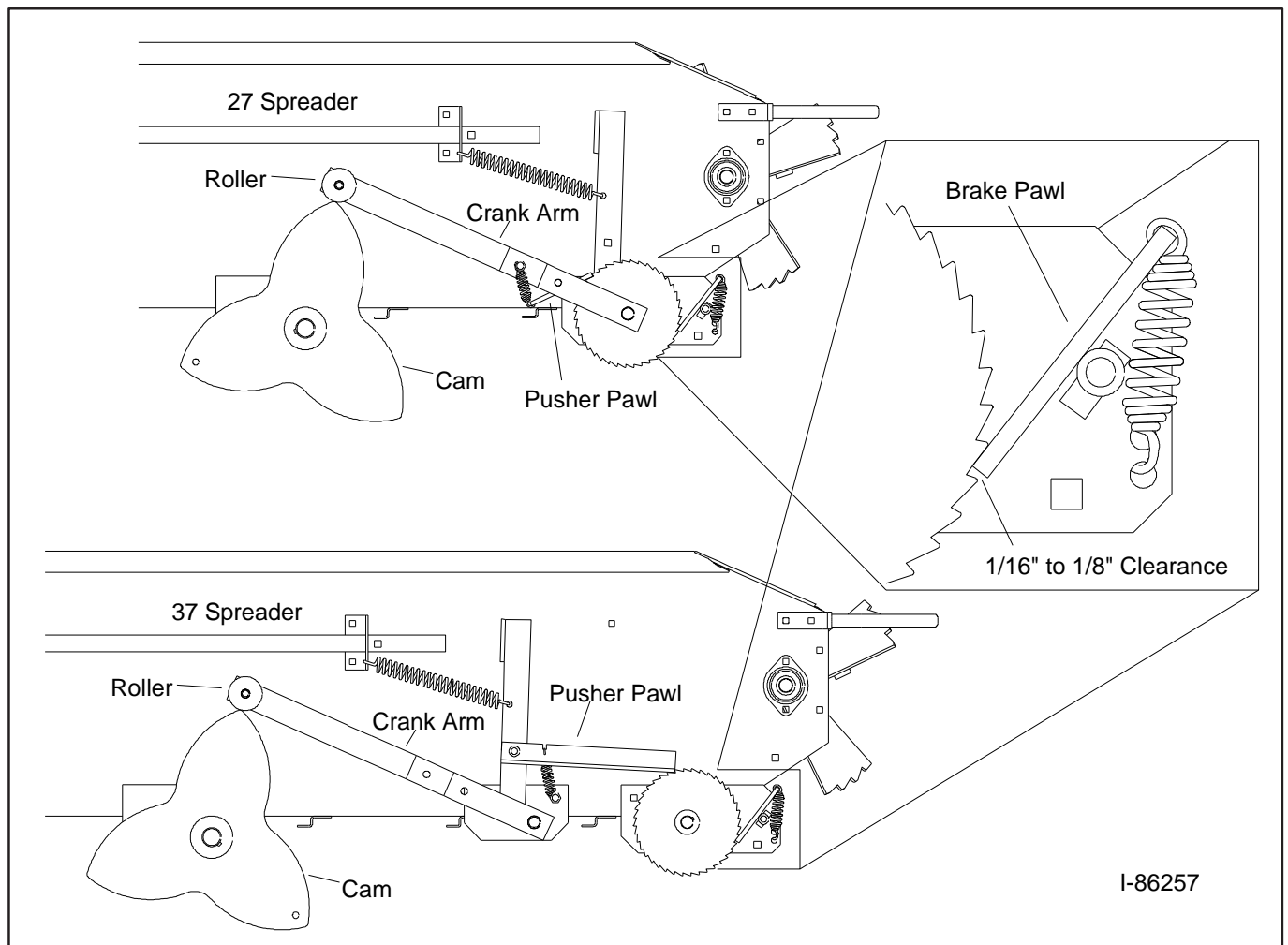


Figure 3C - Adjusting the Rear Brake Pawl

Procedures for Spreader Adjustment (continued)

Re-installing the Beater Drive Chain

The following procedure explains how to re-install the chain should this ever become necessary. As needed, refer to the **Beaters and Drive Assembly** parts detail in **Appendix A** at the back of this manual.

1. Disconnect the spreader from the tractor.
2. Securely block up the right side of the spreader, and remove the right side wheel.
3. Remove the right safety shield by removing the three (3) nuts holding the shield in place.
4. At the front of the spreader, pull up on the right lever to engage the beater drive components.
5. As shown in Figure 3D, re-install the chain around the small rear sprocket.
6. Re-install the chain over the top idler sprocket.
7. Re-install the chain around the bottom idler sprocket.
8. Push the operating lever down (right side) to disengage the beater drive.
9. Verify that the chain is positioned properly over and around all sprockets as shown in Figure 3D.
10. Re-install the safety shield with the three (3) nuts to hold it in place.
11. Re-install the wheel and torque the wheel bolts to 60 ft. lbs. Remove the safety blocking.

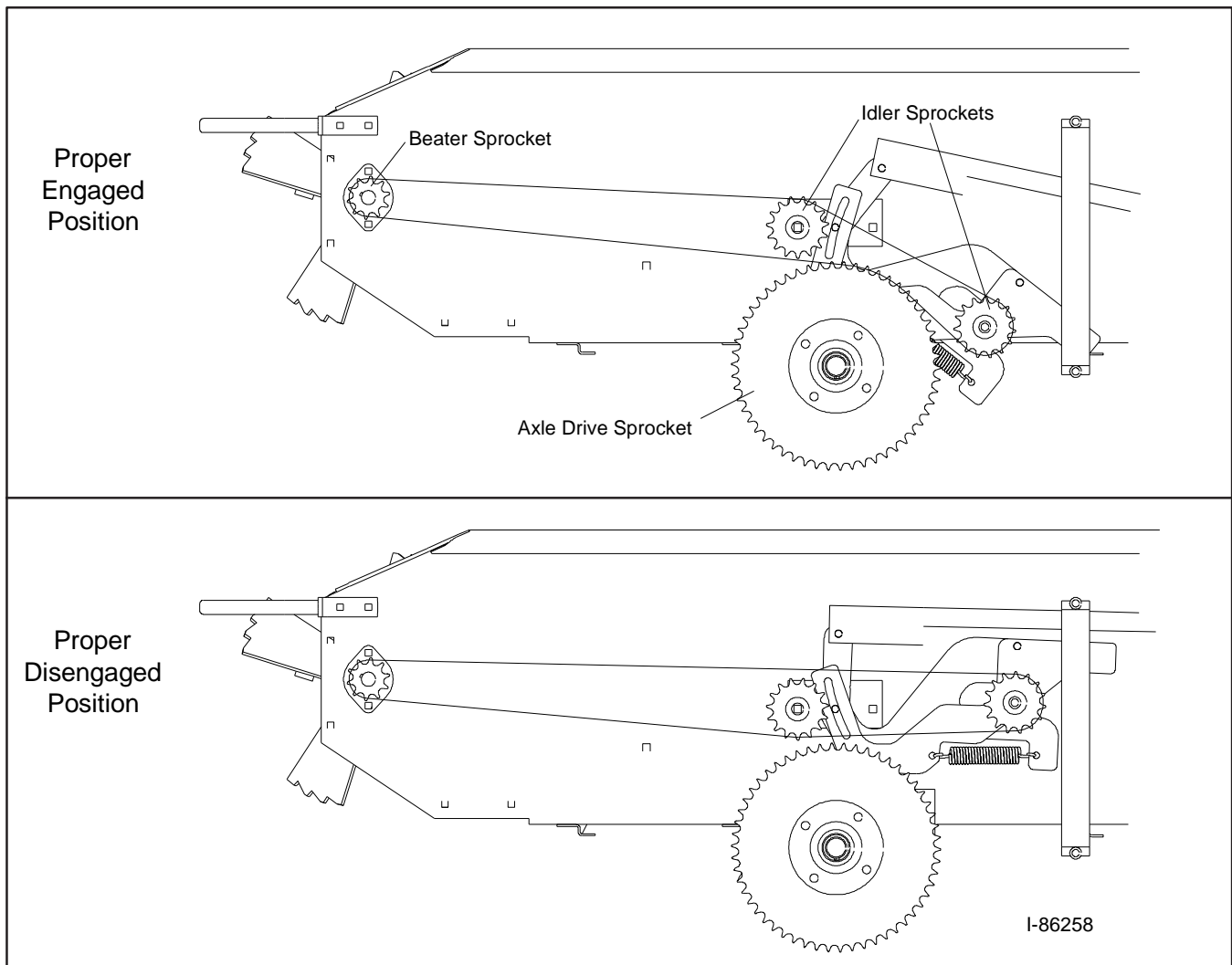


Figure 3D - Beater Drive Chain Installed in the Proper Position

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 27ss	Model 37ss
Capacity, struck	16.0 cubic ft.	22.0 cubic ft.
Capacity, heaped	28.0 cubic ft.	37.3 cubic ft.
Body Length	72 inches	96 inches
Body Width	28 inches	28 inches
Body Flare Width	34 inches	34 inches
Body Height	15 inches	15 inches
Overall Length	9 ft., 3 inches	11 ft., 3 inches
Overall Width	46 inches	46 inches
Overall Height	26.5 inches	26.5 inches
Loading Height	26.5 inches	26.5 inches
Floor Type	Lifetime Poly Boards	Lifetime Poly Boards
Body Construction	Type 304 Stainless Steel	Type 304 Stainless Steel
Apron Chain	Stainless Steel T-rod	Stainless Steel T-rod
Tires*	6-12 traction tire (28 psi max.)	6-12 traction tire (28 psi max.)
Bearings (beater/axles)	Sealed ball bearings	Sealed ball bearings
Beater Drive	#50 roller chain	#50 roller chain
Apron Drive	Ratchet	Ratchet
Weight (with tires)	405 lbs.	490 lbs.
Tractor Size (weight required)	15 HP+ tractor or 350cc ATV	18 HP+ tractor or 450cc ATV

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

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 left corner of the spreader)
- Part Number and Description as it appears on the following drawings/parts lists

Spreader Box, Hitch Assembly and Spreader Controls

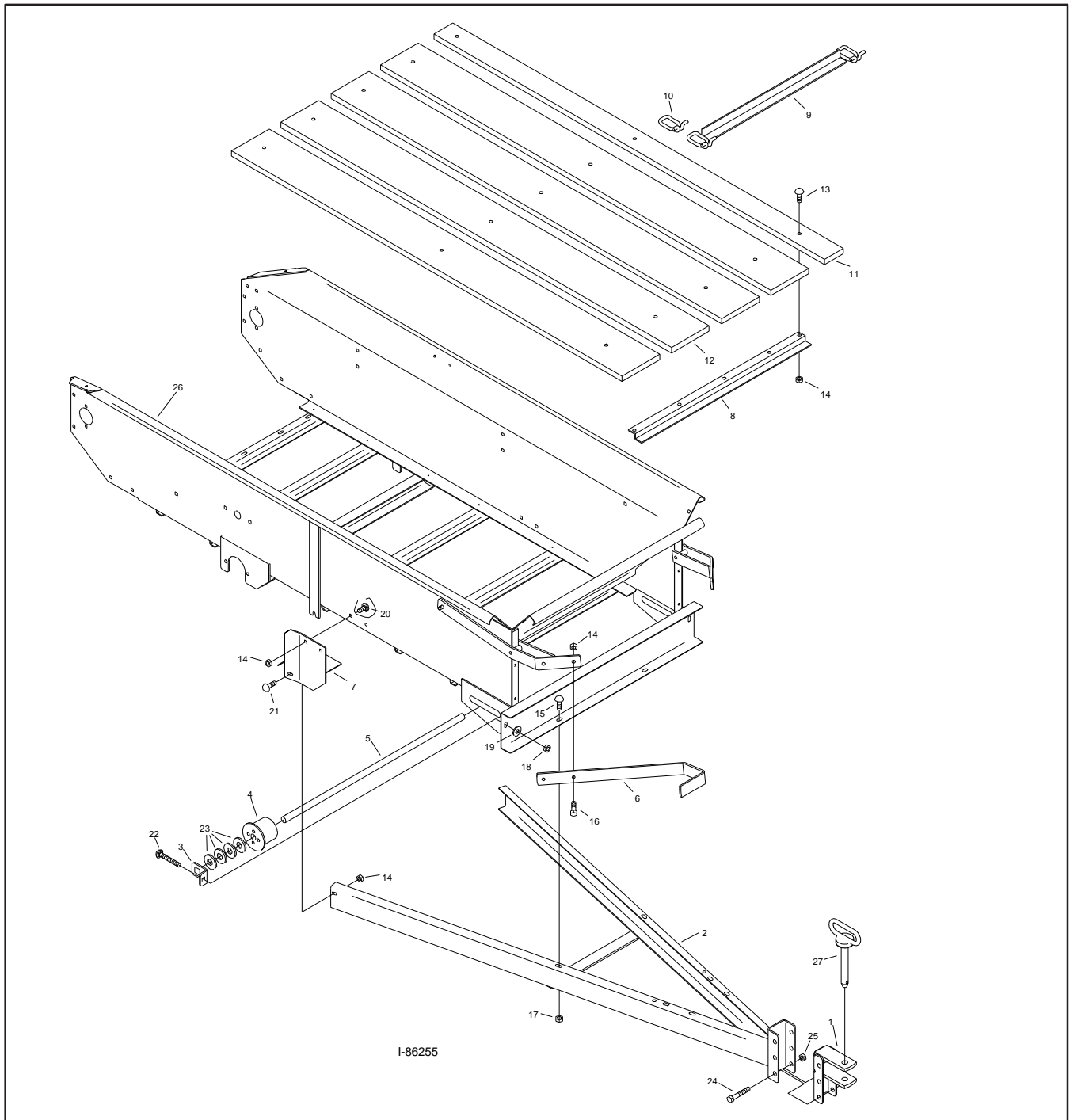


Figure A1 - Spreader Box, Hitch Assembly and Spreader Controls Part Detail

Spreader Box, Hitch Assembly and Spreader Controls (continued)

<u>Item #</u>	<u>MC Part #</u>	<u>Qty</u>	<u>Component Description</u>
1	261662	1	Adjustable Hitch
2	261658	1	Hitch
3	261587	2	Apron Tightener Bracket
4	220167	2	Plastic Idler
5	261743	1	Apron Idler Shaft
6	261136	2	Handle
7	261767	1	Right Hitch Bracket
	261766	1	Left Hitch Bracket
8	260112	2	Floor Hold Down
9	261985	8,11	SS Apron Slat
10	210478	94,128	SS T-rod Chain Link
11	261894	1	Half Floor Board 27
	261896	1	Half Floor Board 37
12	261893	4	Floor Board 27
	261895	4	Floor Board 37
13	34282SS	15	5/16 x 1-1/2 Carriage Bolt
14	34099	25	5/16 Flange Nut
15	34191	2	3/8 x 3/4 Carriage Bolt
16	34336	4	5/16 x 1 Flange Bolt
17	34392	4	3/8 Wide Flange Nut
18	34220	2	3/8 Nylon Lock Nut
19	34018	2	3/8 Washer
20	34337SS	4	5/16 x 1/2 Carriage Bolt
21	34274	2	5/16 x 3/4 Carriage Bolt
22	34389	2	3/8 x 3-3/4 Carriage Bolt
23	34201	8	3/4 Washer
24	34268	2	1/2 x 3-1/2 Bolt
25	34211	2	1/2 Nylon Lock Nut
26	261728SS	1	27 Spreader Box
	261729SS	1	37 Spreader Box
27	220156	1	Hitch Pin

Axle, Wheel and Safety Shield Assembly

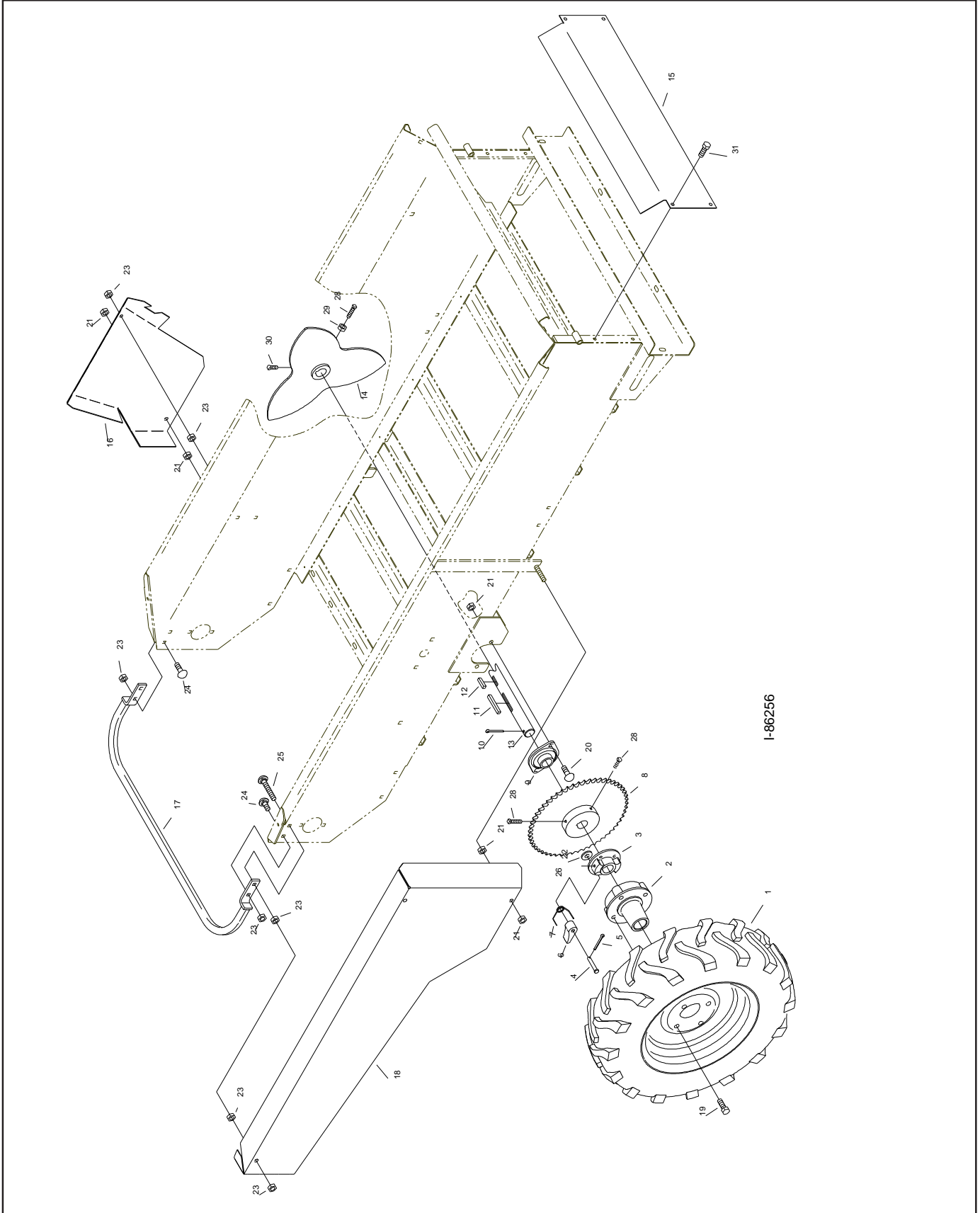
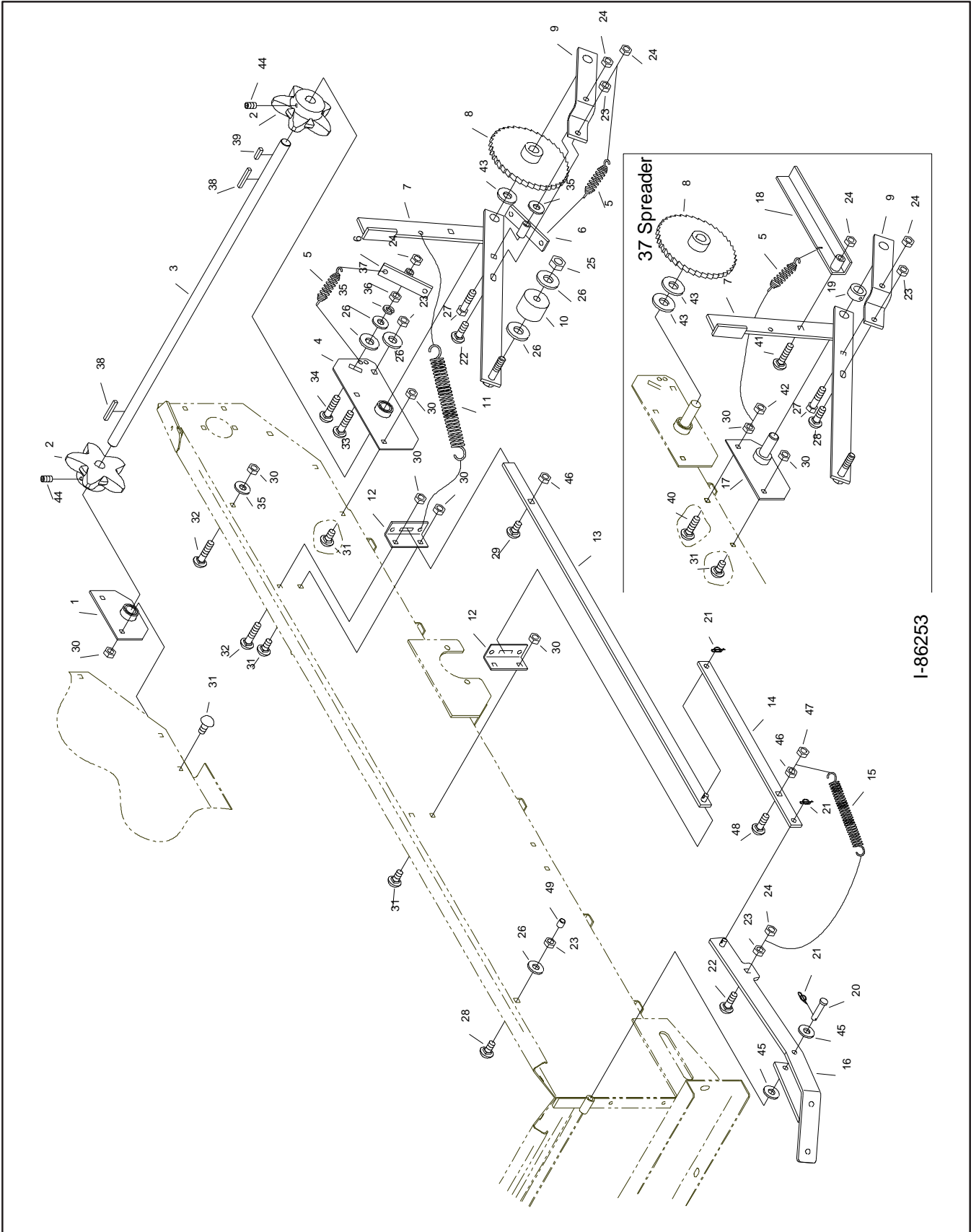


Figure A2 - Axle, Wheel and Safety Shield Assembly Parts Detail

Axle, Wheel and Safety Shield Assembly (continued)

Item #	MC Part #	Qty	Component Description
1	215120	1	Left Wheel
	215263	1	Right Wheel
2	261898	2	Ratcheting Hub (includes bushings 210100)
3	215358	2	Keyed Hub
4	220207	2	1/4 x 1-1/4 Clevis Pin
5	34385	2	3/32 x 3/4 Cotter Pin
6	215359	2	Pawl
7	220201	2	Torsion Spring
8	210456	1	54 Tooth Sprocket
9	210227	2	1-1/8" 2 Bolt Flanged Bearing
10	34387	2	1/4 x 2-1/2 Cotter Pin
11	210466	2	1/4 x 2 Key
12	210130	2	1/4 x 1 Key
13	261779	1	Axle Shaft
14	261771	1	Cam Wheel
15	261874SS	1	Front Shield
16	261869SS	1	Left Side Shield 27
	261891SS	1	Left Side Shield 37
17	261738SS	1	Rear Guard Bar
18	261868SS	1	Right Side Shield 27
	261872SS	1	Right Side Shield 37
19	34386	8	1/2 x 1 Lug Bolt
20	34006	4	3/8 x 1 Carriage Bolt
21	34392	10	3/8 Wide Flange Nut
22	34414	2	1/4 SAE Washer
23	34099	12	5/16 Flange Nut
24	34274SS	7	5/16 x 3/4 Carriage Bolt
25	34366SS	1	5/16 x 3 Carriage Bolt
26	34409	4	5/16 x 3/4 Set Screw
28	34215	3	5/16 x 2 Square Head Set Screw
29	34020	1	5/16 Nut
30	34290	1	5/16 x 3/4 Square Head Set Screw
31	34136	4	5/16 x 1/2 Flange Bolt

Apron Chain Drive Group



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Figure A3 - Apron Chain Drive Group Parts Detail

Apron Chain Drive Group (continued)

<u>Item #</u>	<u>MC Part #</u>	<u>Qty</u>	<u>Component Description</u>
1	261739	1	Right Side Apron Bracket
2	210436	2	5 Tooth Sprocket
3	261772	1	Apron Shaft
4	261754	1	Left Side Apron Bracket
5	220104	2	Pawl Spring
6	261830	2,1	Pawl
7	261752	1	Cam Roller Arm
8	261748	1	Ratchet
9	261829	1	Short Crank Arm
10	261050	1	Cam Roller
11	220105	1	Ratchet Spring
12	261756	2	Side Link Guide
13	261867	1,0	Long Linkage 27
	261871	0,1	Long Linkage 37
14	261832	1	Short Linkage
15	220138	1	Front Lever Spring
16	261818	1	Left Side Lever
17	261884	0,1	Roller Arm Mounting Bracket
18	261900	0,1	Drive Pawl 37
19	210124	0,1	3/4" Shaft Collar
20	220199	1	1/4 x 2-1/4 Clevis Pin
21	220204	3	Wire Locking Clip
22	34218	2,1	3/8 x 1-1/2 Carriage Bolt
23	34392	4	3/8 Wide Flange Nut
24	34391	4	3/8 Center Locking Nut
25	34198	1	1/2 Thin Nylon Locking Nut
26	34227	4	1/2 Washer
27	34202	1,0	3/8 x 2-1/4 Bolt
28	34006SS	1,2	3/8 x 1 Carriage Bolt
29	34314	1	1/4 x 1/2 Carriage Bolt
30	34099	8,11	5/16 Flange Nut
31	34337SS	7,8	5/16 x 1/2 Carriage Bolt
32	34412SS	1,2	5/16 x 3-1/2 Carriage Bolt
33	34390	1	3/8 x 3-1/2 Carriage Bolt
34	34219	1	3/8 x 2-1/2 Carriage Bolt
35	34018	2,3	3/8 Washer
36	34141	1	3/8 Lock Washer
37	34087	1	3/8 Nut
38	34410	2	3/16 x 1-1/2 Key
39	210129	1	3/16 x 1 Key
40	34282	0,1	5/16 x 1-1/2 Carriage Bolt
41	34413	0,1	3/8 x 2 Carriage Bolt
42	34223	0,1	5/16 Nylon Locking Nut
43	34201	1,2	3/4 Washer
44	34409	2	5/16 x 3/4 Set Screw
45	34057	2	5/16 Washer
46	34092	2	1/4 Flange Nut
47	34124	1	1/4 Nylon Lock Nut
48	34245	1	1/4 x 1-1/4 Carriage Bolt
49	220208	1	Rubber Cap

Beaters and Drive Assembly

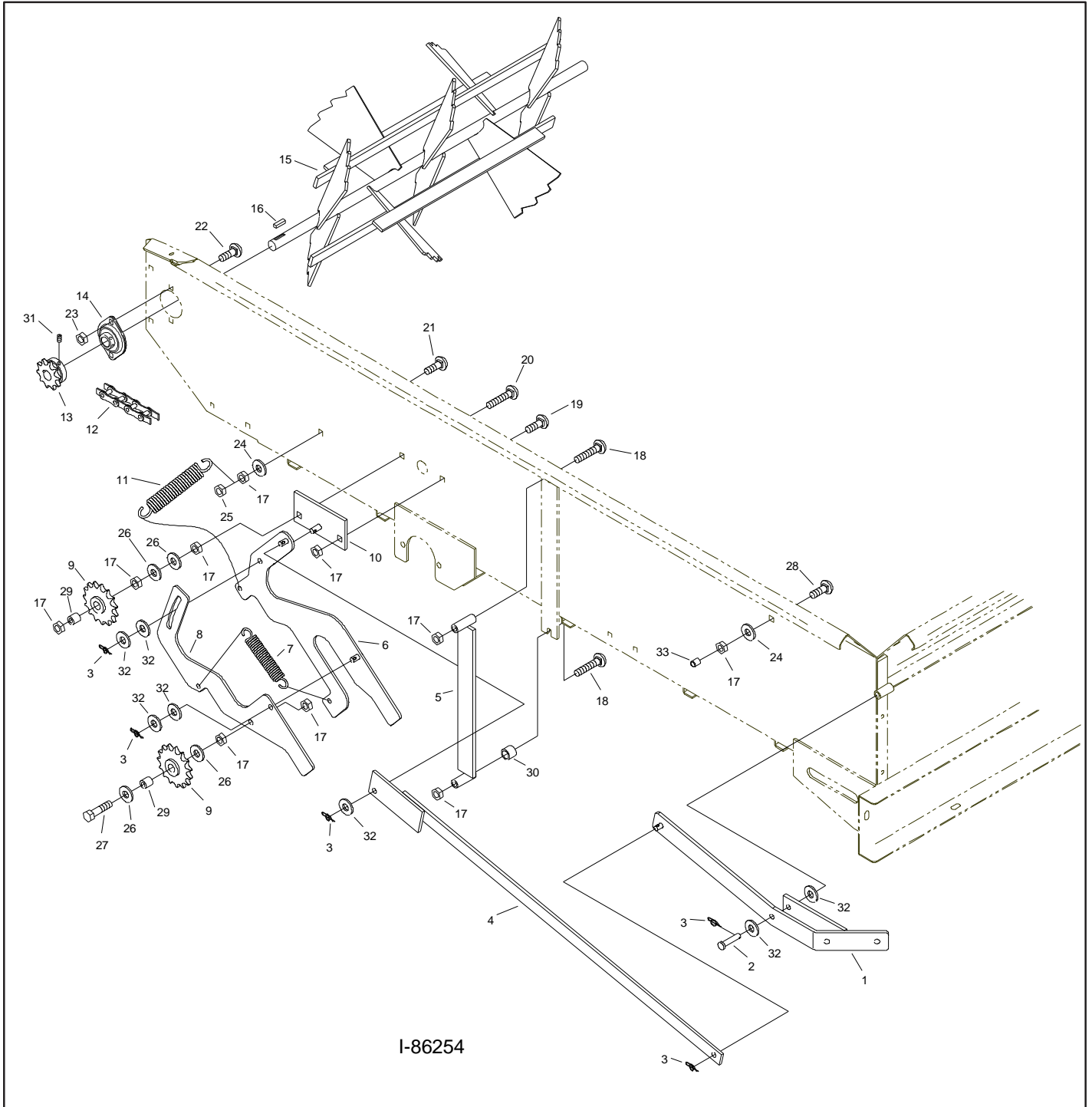
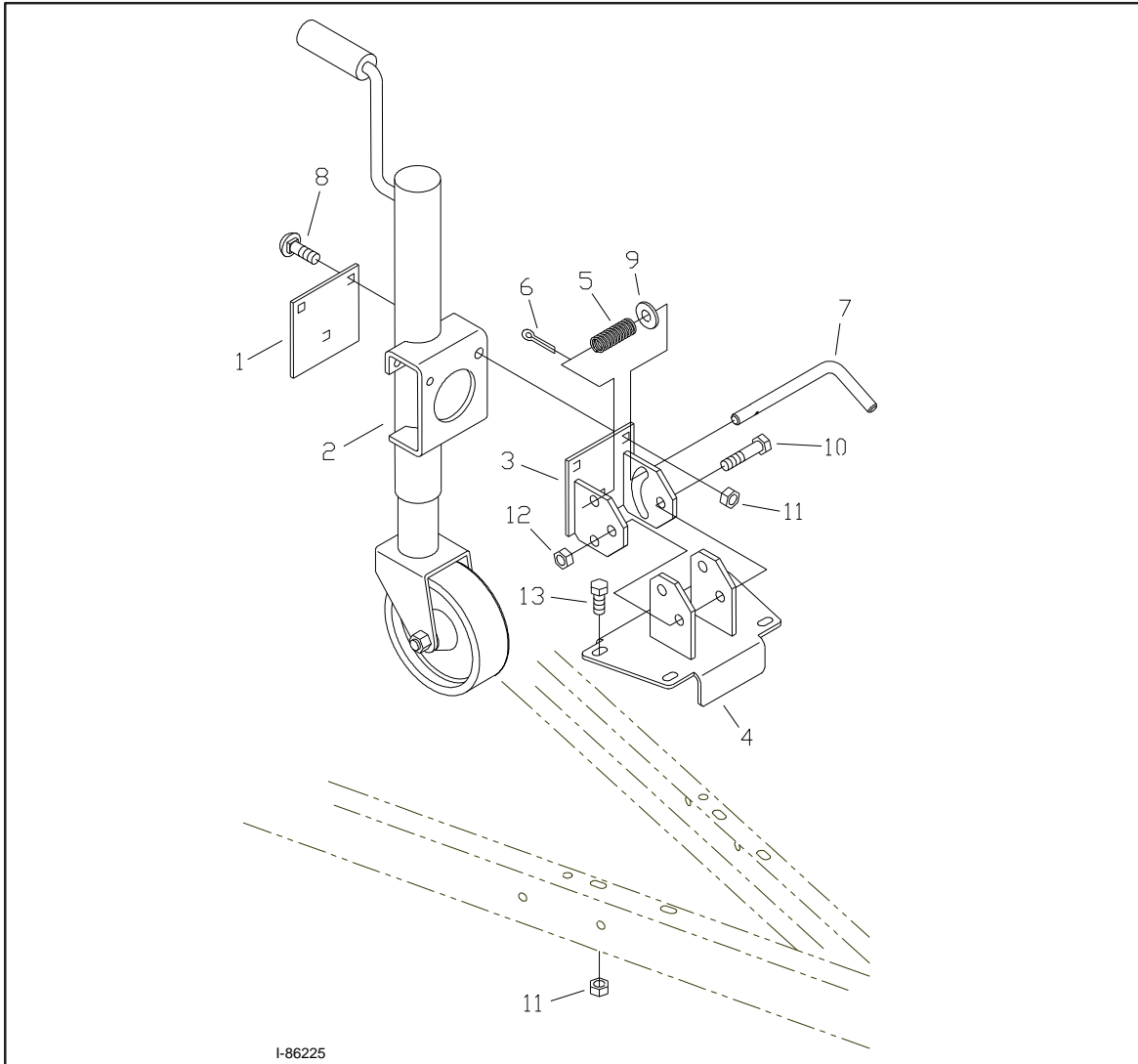


Figure A4 - Beaters and Drive Assembly Parts Detail

Beaters and Drive Assembly (continued)

Item #	MC Part #	Qty	Component Description
1	261837	1	Right Side Lever
2	220199	1	1/4 x 2-1/4 Clevis Pin
3	220204	5	Wire Locking Clip
4	261866	1	Linkage 27
	261870	1	Linkage 37
5	261864	1	Guide Bracket
6	261865	1	Lift Arm
7	220171	1	Chain Tensioner Spring
8	261855	1	Idler Bracket
9	210433	2	15 Tooth Idler Sprocket
10	261828	1	Lift Arm Mounting Bracket
11	220105	1	Long Spring
12	210463	1	27 Chain (#50 x 122 Links)
	210464	1	37 Chain (#50 x 151 Links)
13	210455	1	10 Tooth Sprocket
14	210106	2	3/4" 2 Bolt Flange Bearing
15	261744SS	1	Beater
16	210128	1	3/16 x 3/4 Key
17	34392	10	3/8 Wide Flange Nut
18	34375SS	2	3/8 x 3 Carriage Bolt
19	34191SS	1	3/8 x 3/4 Carriage Bolt
20	34219SS	1	3/8 x 2-1/2 Carriage Bolt
21	34218SS	1	3/8 x 1-1/2 Carriage Bolt
22	34337SS	4	5/16 x 1/2 Carriage Bolt
23	34099	4	5/16 Flange Nut
24	34227	2	1/2 Washer
25	34391	1	3/8 Center Locking Nut
26	34018	4	3/8 Washer
27	34252	1	3/8 x 1-3/4 Bolt
28	34006SS	1	3/8 x 1 Carriage Bolt
29	280262	2	Idler Bushing
30	261899	1	Rubber Hose
31	34306	2	1/4 x 1/4 Set Screw
32	34057	7	5/16 Washer
33	220208	1	Rubber Cap

Dollywheel/Jack



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Figure A5 - Dollywheel/Jack Parts Detail

<u>Item #</u>	<u>MC Part #</u>	<u>Qty</u>	<u>Component Description</u>
1	261630	1	Jack Mount Plate
2	215347	1	Dolly Wheel Jack
3	261635	1	Jack Bracket
4	261636	1	Jack Pivot Bracket
5	220190	1	Spring
6	34209	1	Cotter Pin
7	261631	1	Latch Pin
8	34006	3	3/8 x 1 Carriage Bolt
9	34227	1	1/2 Washer
10	34269	1	1/2 x 4 Bolt
11	34009	7	3/8 Flange Nut
12**	34211	1	1/2 Nylon Lock Nut
13	34330	4	3/8 x 3/4 Flange Bolt

****NOTE:** The **JACK PIVOT BRACKET** must be able to **PIVOT** for proper operation; DO NOT overtighten the 1/2 Nylon lock nut (**item #12**). Millcreek recommends that you just tighten the lock nut, then loosen 1/4 turn for proper movement.

Manual Endgate

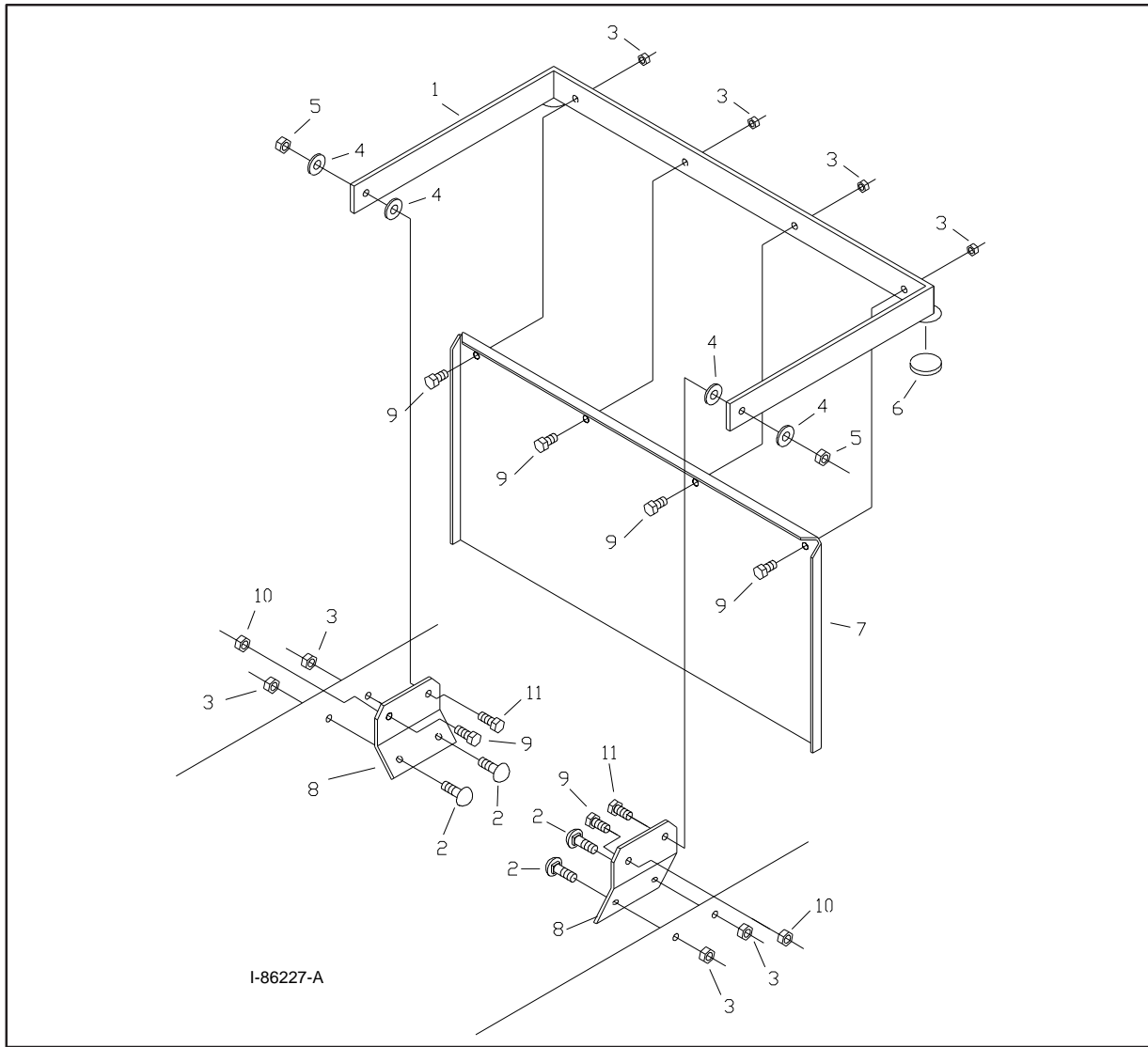


Figure A6 - Manual Endgate Parts Detail

Item #	MC Part #	Qty	Component Description
1	261670	1	Endgate Frame
2	34274	4	5/16 x 3/4 Carriage Bolt
3	34099	8	5/16 Flange Nut
4	34057	4	5/16 Washer
5*	34072	2	5/16 Grade B Lock Nut
6**	220192	2	Endgate Stop (rubber foot)
7	260966SS	1	Endgate
8	260965	2	Endgate Plate
9	34328SS	6	5/16 x 3/4 Flange Bolt
10	34223	2	5/16 Nylon Stop Nut
11	34336	2	5/16 x 1 Flange Bolt

***NOTE:** The **ENDGATE FRAME** must be able to **PIVOT** for proper operation; **DO NOT** overtighten the Grade B lock nut (**item #5**). Millcreek recommends that you just tighten the lock nut, then loosen 1/4 turn for proper movement.

****NOTE:** When replacing the endgate stop pieces, use 2-3 drops of Loctite #480 (or equivalent adhesive).

Fines Pan

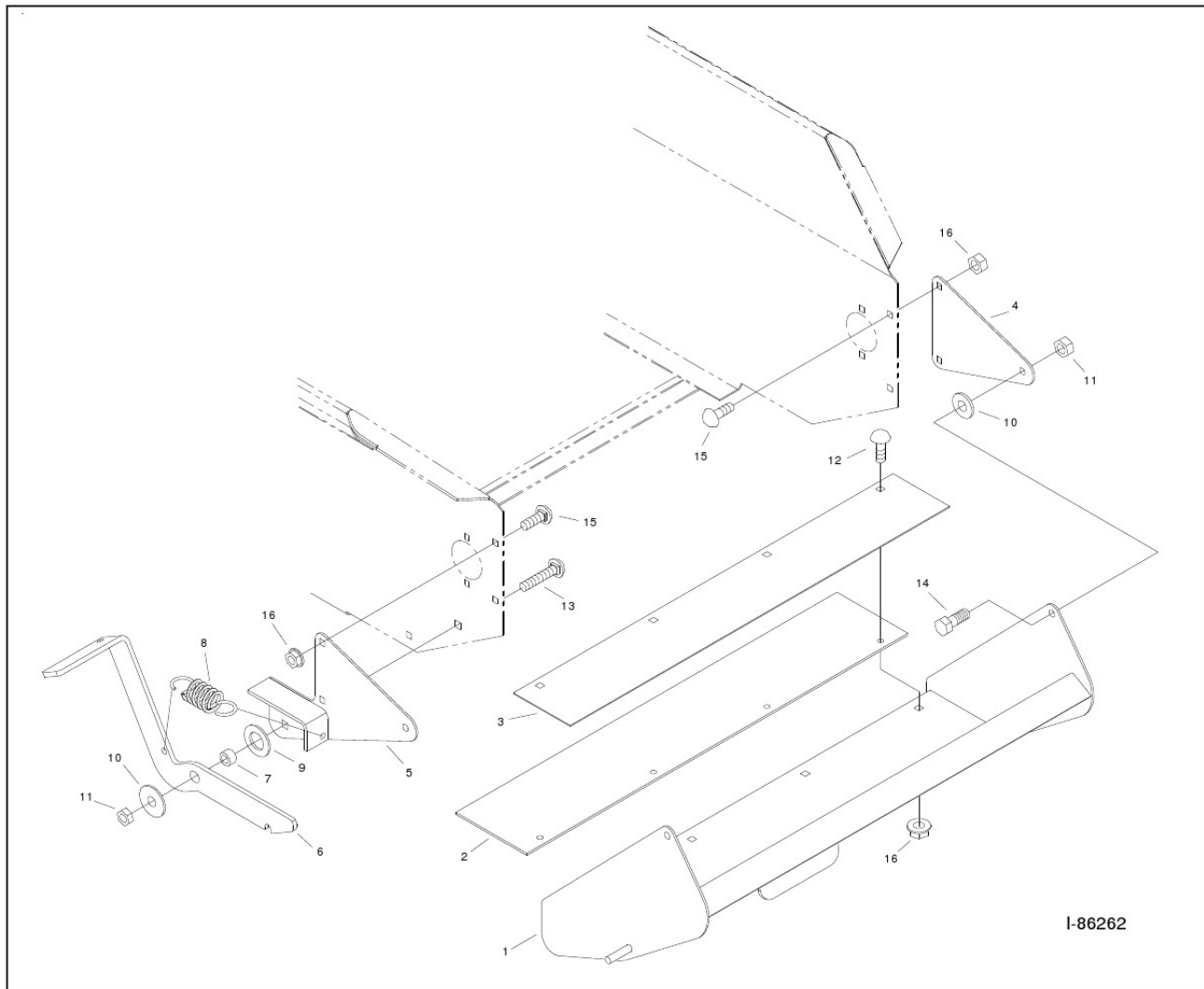


Figure A7 - Fines Pan Parts Detail

Item #	Millcreek Part #	Qty.	Component Description
1	261843	1	Fines Pan
2	261847	1	Rubber Seal
3	261848	1	Hold Down Plate
4	261844	1	Bracket RH
5	261849	1	Bracket LH
6	261846	1	Lever
7	260998	1	Spacer
8	220171	1	Spring
9	34300	1	3/4 SAE Washer
10	34018	3	3/8 Flat Washer
11	34391	3	3/8 Center Lock Nut
12	34320	4	5/16 x 1-1/4 Carriage Bolt
13	34218	1	3/8 x 1-1/2 Carriage Bolt
14	34190	2	3/8 x 1 Bolt
15	34274	4	5/16 x 3/4 Carriage Bolt
16	34099	8	5/16 Flange Nut