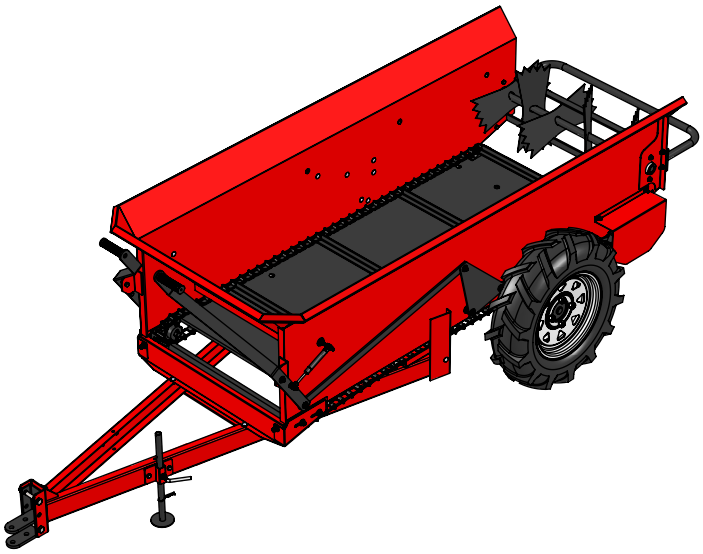
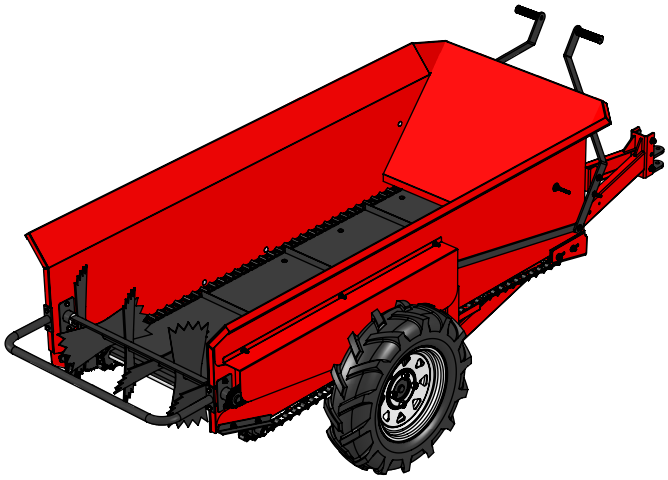
OWNER'S MANUAL

Model: MS-25BU (5301194)

(25 Bushel Pull-Behind Manure Spreader)





ATTENTION

FOR YOUR SAFETY, PLEASE READ THE ENTIRE MANUAL BEFORE USING THE SPREADER. THIS MANUAL CONTAINS DETAILED INSTRUCTIONS ON THE PROPER MAINTENANCE AND OPERATING PROCEDURES FOR OPTIMAL USE OF THE MANURE SPREADER.

General Information

Thank you for purchasing this product. The purpose of this manual is to assist you in operating and maintaining your newly purchased unit. Please read it carefully, as it furnishes information which will help you achieve years of trouble-free operation.

Warranty/Parts/Service

For home usage, products are warranted for one year from date of purchase against manufacturer or workmanship defects.

Commercial users have a 90 day warranty.

Your authorized dealer is the best source of replacement parts and service. To obtain prompt, efficient service, always remember to give the following information...

- Correct Part Description and/or part number.
- Model number/Serial number of your sprayer.

Part descriptions and part numbers can be obtained from the illustrated parts list section(s) of this manual.

Whenever you need parts or repair service, contact your distributor/dealer first. For warranty work, always take your original sales slip, or other evidence of purchase date, to your distributor/dealer.

BEFORE RETURNING THIS PRODUCT FOR ANY REASON, PLEASE CALL

1-800-831-0027

IF YOU SHOULD HAVE A QUESTION OR EXPERIENCE A PROBLEM WITH YOUR FIMCO INDUSTRIES PRODUCT:

1-800-831-0027

BEFORE YOU CALL, PLEASE HAVE THE FOLLOWING INFORMATION AVAILABLE: SALES RECEIPT & MODEL NUMBER. IN MOST CASES, A FIMCO INDUSTRIES EMPLOYEE CAN RESOLVE THE PROBLEM OVER THE PHONE.

FIMCO INDUSTRIES

www.fimcoindustries.com

1000 FIMCO Lane, P.O. Box 1700, North Sioux City, SD 57049
Toll Free Phone: 800-831-0027 : Toll Free Fax: 800-494-0440

Form No. 708 [5004582 (07/12)] Printed in the U.S.A.

General Maintenance

Do not attempt, under any circumstance, to work with the chain drive mechanisms while the spreader is moving. To clean, service, adjust, unclog, or any other function, the spreader must be stationary. (Even though it would appear to be safe.) If the mechanism starts to move, your safety could be at risk. Follow these steps before attempting to maintain or repair any part of the spreader.

1. Unhitch the spreader from the towing vehicle.

2. Block both wheels front and back or raise the entire spreader. Support the spreader so the wheels may turn if necessary. Use care to provide adequate stationary support.

3. Engage the control levers only to move the drive chain mechanism.

4. Always be sure the safety guards are in place after maintenance and before moving the spreader.

5. Oil the roller chain and detachable chain once a week or as use and weather conditions demand. Do not let the chains go dry.

6. Grease the bushings for the axle shafts, the shafts for the rotary, blades, and the shaft for the detachable chain drive.

7. Cleaning the spreader after each use will prolong its life and make the maintenance easier.

Assembly Instructions

1. Remove all parts of the manure spreader from the crate.

   A. Note that the tongue is fastened to the crate. Free the tongue parts from the crate and then remove the top cross boards.

   B. The wheels and tires may be lifted from the unit frame.

   C. Note the small parts bag with the wheels, open it, and remove the contents.

2. Attach the tongue to the main frame using (4) carriage screws, 5/16-18NC x 3/4” and (4) 5/16” whiz lock nuts. You may want to refer to the exploded view drawing.

3. The control levers must be attached to the bolt on each side near the front of the frame. The lock nuts are already attached to the appropriate parts. Remove them, affix the parts in place, and secure the parts with the lock nuts. Use a 5/16” lock nut to hold the control levers in place. Tighten the lock nut so that the levers may pivot easily, but with a minimum of play. You can now join the gas shock (Item 84) to the lever on the left front end using a 5/16” lock nut.

4. Place the manure spreader onto a platform at least 12” from the ground. Use a front end loader or a jack to raise the spreader safely.

   A. Note there are right and left wheels. The tread should point to the rear as viewed from top of the tire.

   B. Each wheel is to be attached using (4) bolts (Item 38) and (4) Wheel Nuts (Item 7).

Parts Included in Crate

1. Main Frame Assembly

2. Tongue & Hitch Assembly

3. (2) Wheels & Tires

4. Small Parts Bag
   A. (4) Carriage Screw, 5/16” - 18 NC x 3/4”
   B. (4) Hex Whiz Lock Nut, 5/16”
   C. (8) Wheel Bolts
   D. (8) Wheel Nuts
   E. (1) Gas Cylinder Shock

Operating Instructions

1. The towing vehicle should be at least of a 10 H.P. variety.

2. The spreader has an adjustable hitch. Set the hitch so the spreader is level when attached to the towing vehicle. The adjustable hitch range is from 7” - 16”.

3. Be sure the towing vehicle can not move when attempting to hitch up to the spreader.

4. Use a quality hitch pin equipped to prevent accidental unhitching.

5. Be sure the safety guards are in place.

6. The control levers should be in the “off” position (rotated downwards) until you are ready to spread manure. Be sure to stop before engaging the controls.

7. Begin loading to the front end of the spreader and gradually work to the rear end.

8. Do not load above the side or front panels.

9. Always allow clearance for the rotary blade mechanism to turn freely before engaging the chain mechanism.

10. It is important to free up any manure that may be frozen or adhered to the floor. This will prolong the life of the drive chain. It is also a good idea to know that the detachable chain mechanism (slide bar) is not adhered to the floor board. This can happen in cold weather when moisture freezes to the chain and floor.

11. Stop moving before engaging or disengaging the controls to the chain drive mechanisms.

12. The proper speed for the desired spreading is from 3 1/2 - 5 MPH Do not exceed 5 MPH or excessive wear and tear will occur.

13. A lways disengage both controls before backing up. Reversing the chain drive mechanism will cause damage to the drive mechanism.

14. It is a good idea to use a slow moving vehicle sign for road travel.

15. Use safe practices when operating the spreader. Better to be safe than sorry.

16. Cleaning the spreader after each use will prolong the life of the spreader and make maintenance easier.

17. Be sure to oil the roller chain as well as the detachable chain, and grease the axle and the pivoting shaft bushings for the rotary blades and the detachable chain. A regular practice of maintenance will prolong the life of the spreader.

18. Raise the control levers to engage the ground drive mechanisms.

Floor Chain Drive Mechanism Adjustment

Periodically adjustments must be made to your manure spreader in order to keep it in peak operating condition. One area which may require periodic adjustment (to compensate for normal usage wear) is the floor chain drive mechanism.

Adjustment Procedure

Step 1. On a flat and level surface, unhitch the spreader from its towing vehicle.

Step 2. Adjust front tip stand so unit is in a reasonably level position.

Step 3. Inspect cam follower roller (Item 57), shown in Detail A, and replace if worn.

Step 4. Raise handle (Item 80), shown in Detail G, on floor chain drive mechanism side only, to its full upright (engaged) position.

Step 5. Roll spreader slightly, a few inches should do the trick, either forward or rearward until the cam follower roller resides at its lowest point on cam (Item 70), shown in Detail K. See Figure 1.

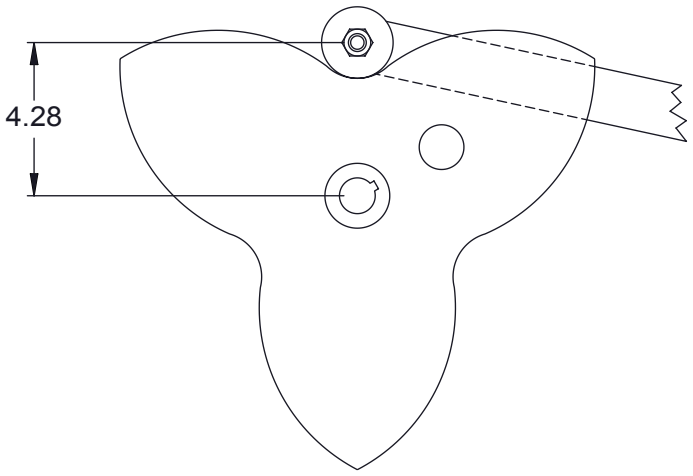


Figure 1

Step 6. At this point block both wheels, front and back, to secure spreader in place.

Step 7. Using a needle nose pliers, unseat the lower end of the 6" spring (Item 21), shown in Detail A, from its vertical mounting bracket.

Step 8. Remove left side shield (Item 62), shown in Detail K. Set shield and hardware off to the side for the time being.

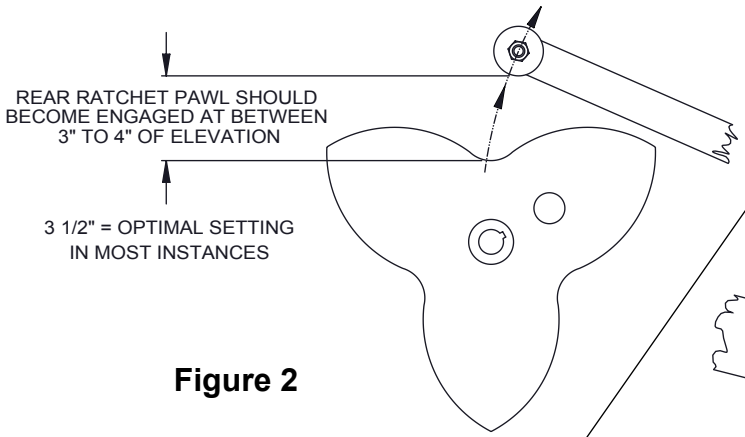


Figure 2

Step 9. Next, slowly lift the cam follower roller (Item 83) upwardly until the rear ratchet pawl engages. The instant the rear ratchet pawl becomes engaged, a reasonably loud "click" should be heard. Refer to Figure 2.

NOTE It is crucial that the lifting of the cam follower roller is stopped the very instant the rear ratchet pawl becomes engaged, in order to provide an accurate reading for set-up. If you happen to go too far, simply push the cam follower roller back down into its lowest position, and lift again slowly.

The optimal setting in most instances is 3-1/2", depending upon the spreader's age and wear pattern.

Step 10. If the rear ratchet engages too quickly or does not engage soon enough, it is out of phase and must be repositioned.

Step 11. Repositioning of the rear ratchet pawl is accomplished quite simply by loosening the rear ratchet pawl adjustment bolt and moving it either up or down within the ratchet pawl adjustment slot, and then retightening. Refer to Figure 3.

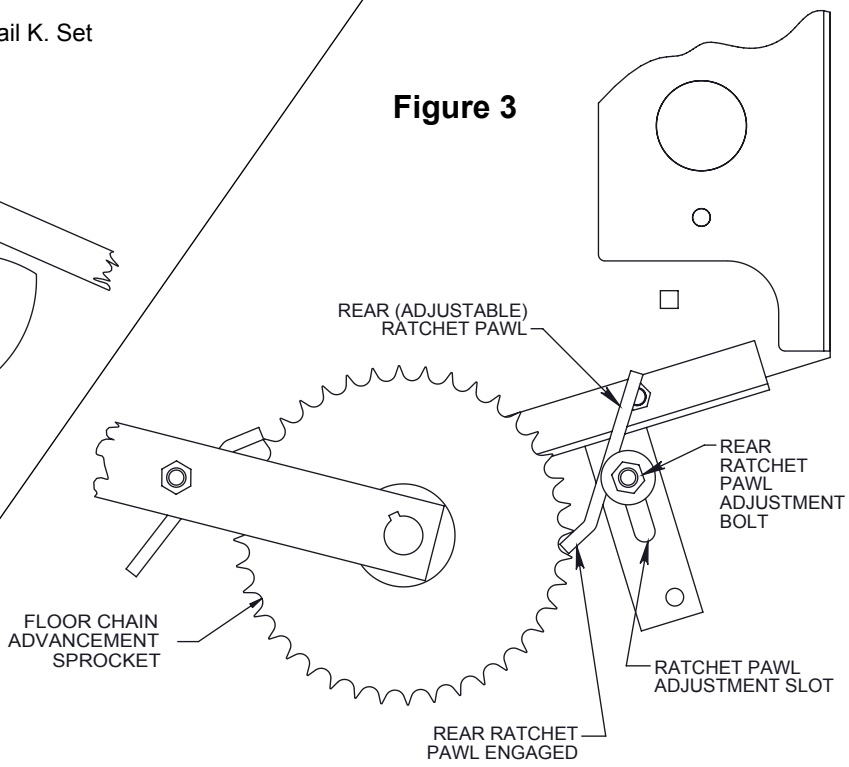
Some trial and error may be involved in this process, as every spreader will require slightly different settings to achieve proper lift distance of the cam follower.

Step 12. Re-attach the 6" spring to its vertical mounting bracket, as well as the left side shield, prior to testing.

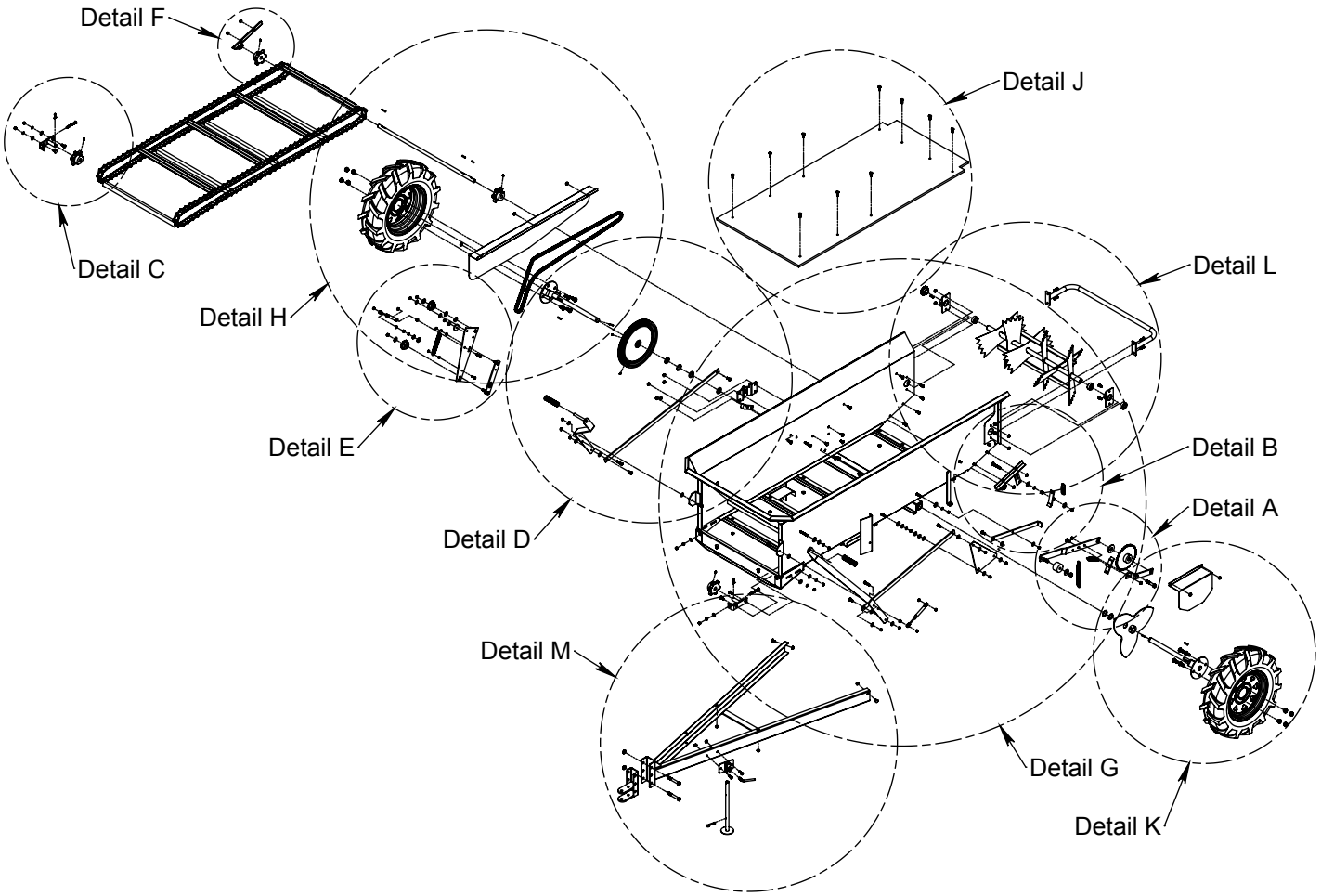
Step 13. Test empty spreader at a reduced speed for a period of time insuring the floor chain drive mechanism is running smoothly.

Step 14. Place back in service.

Figure 3



Overall Exploded View & Repair Parts List:
MS-25BU (5301194)

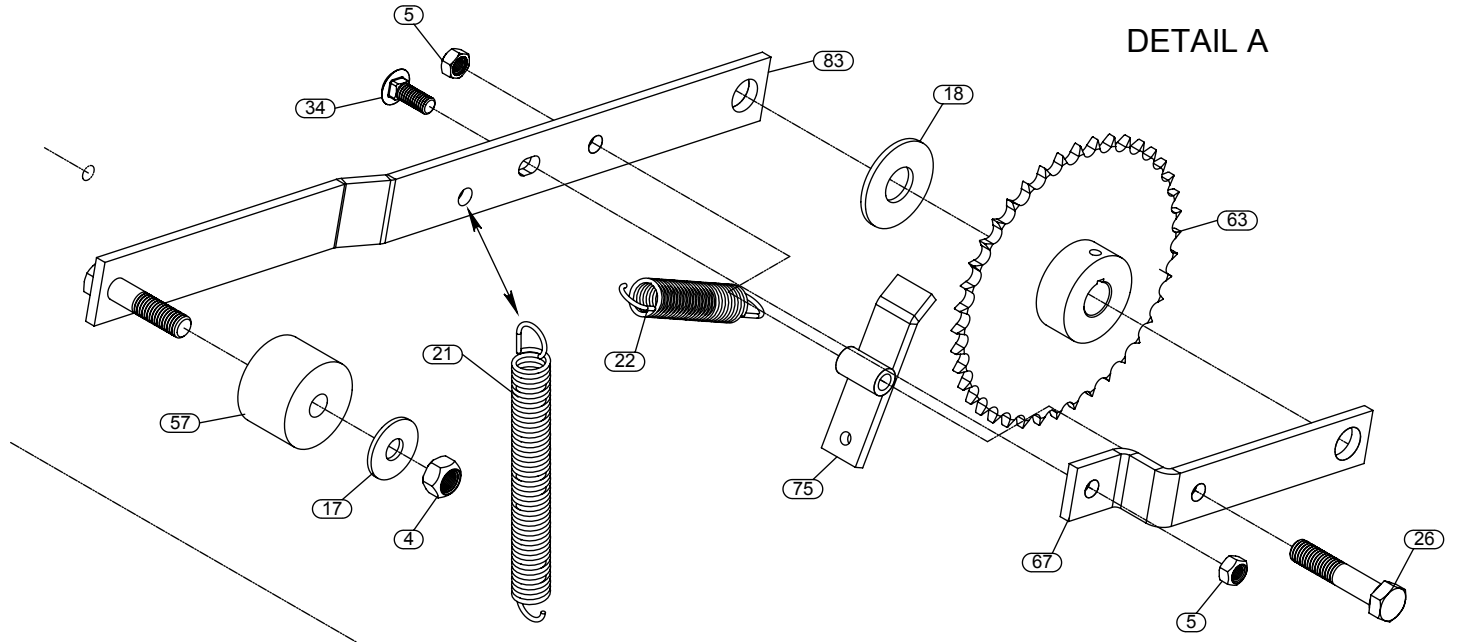


** Refer to all detail views for parts call-out, and notes, on the following pages **

Item No	Part Number	Qty	Description	List Price
1	5006035	16	5/16"-18 Hex Locknut	.57
2	5006040	13	5/16"-18 Hex Nut	.25
3	5006054	1	3/8"-16 Hex Nut	.26
4	5006091	1	1/2"-13 Hex Locknut	.25
5	5006092	5	3/8"-16 Hex Locknut	.26
6	5006160	4	1/4"-20 Hex Locknut	.25
7	5006301	8	1/2"-20 Hex Cone Wheel Nut	.52
8	5006307	41	5/16"-18 Hex Whiz (Flange) Locknut	.26
9	5006337	2	1/2"-13 Hex Whiz (Flange) Locknut	.31
10	5012015	6	Grease Zerk, 1/4"-28 Thread	.45
11	5015144	1	Linkage Rod (Left Side)	11.61
12	5015145	1	Linkage Rod (Right Side)	12.06
13	5016020	30	Flatwasher, 5/16"	.25
14	5016026	9	Lockwasher, 5/16"	.25
15	5016027	1	Lockwasher, 3/8"	.25
16	5016030	11	Flatwasher, 3/8"	.26
17	5016031	1	Flatwasher, 1/2"	.25
18	5016160	1	Flatwasher, 3/4"	.35
19	5017808	1	Pivot Plate	11.97
20	5019254	1	Extension Spring	4.14
21	5019255	1	Spring, 6"	4.71
22	5019256	2	Spring, 3"	2.88
23	5022386	1	Stop Angle	6.27
24	5023095	1	Trip Arm	8.31
25	5034022	2	H.H.C.S., 1/2"-13 x 3 1/2"	1.01
26	5034036	1	H.H.C.S., 1/2"-13 x 2 1/2"	.65
27	5034038	8	H.H.C.S. 5/16"-18nc x 3/4" Long	.85
28	5034042	8	H.H.C.S. 5/16"-18nc x 1" Long	.26
29	5034069	2	H.H.C.S. 5/16"-18nc x 1 1/2" Long (Full Thread)	.25
30	5034076	1	H.H.C.S., 5/16"-18 x 1 1/4"	.29
31	5034083	1	H.H.C.S. 1/4"-20 x 1"	.25
32	5034448	9	Carriage Bolt, 5/16"-18 x 1"	.30
33	5034477	2	Carriage Bolt, 5/16"-18 x 1 1/2" (Full Thread)	.15
34	5034482	1	Carriage Bolt, 3/8"-16 x 1"	1.00
35	5034534	11	Carriage Bolt, 5/16"-18 x 3/4"	.10
36	5034536	1	5/16"-18 x 2" Carriage Bolt	.20
37	5034538	2	Carriage Bolt, 5/16"-18 x 2 1/2"	.23
38	5034540	8	Serrated Shoulder Bolt, 1/2"-20 N.F. x 1 1/8"	1.60
39	5034541	13	5/16"-18 x 1" Slotted Truss Head Machine Screw	.15
40	5034544	1	Carriage Bolt, 3/8"-16 x 2 1/2" (Full Thread)	.40
41	5034550	2	Carriage Bolt, 5/16"-18 x 3" (Full Thread)	4.20
42	5041113	1	Machinery Bushing, 1 1/2" O.D. x 1" I.D. x 10 Ga.	.58
43	5041122	5	Machinery Bushing, 1 1/2" O.D. x 1" I.D. x 14 Ga.	.50
44	5049053	1	#40 Roller Chain x 84"	24.76
45	5055044	3	Steel Set Collar (1" Bore, 5/8" Width, 1 5/8" O.D.)	1.46
46	5063254	1	Disc	2.73

(List Prices are Subject to Change)

Item No	Part Number	Qty	Description	List Price
47	5078180	2	Handle Grip	6.21
48	5089047	3	1/4" Square Keystock x 1" Long	.50
49	5089051	1	3/16" Square Keystock x 1 1/4" Long	5.18
50	5089052	1	3/16" Square Keystock x 1" Long	.50
51	5089053	1	3/16" Square Keystock x 3/4" Long	.40
52	5094017	1	Master Link	.98
53	5099046	1	Floor Panel (Manure Spreader)	100.00
54	5101065	1	Hair-Pin Cotter (0.120" Dia.)	.40
55	5101207	2	Cotter Pin, 5/32" x 1 3/4"	.11
56	5101248	2	Roll Pin, 1/4" Dia. x 1 1/2"	.50
57	5112034	1	Cam Roller	5.43
58	5117259	1	Handle Screw	3.01
59	5117298	5	1/4"-28 x 3/8" Socket-Head Set Screw	.30
60	5118189	1	Floor Chain Shaft (Rear)	32.16
61	5120054	1	Right Side Shield	29.32
62	5120055	1	Left Side Shield	12.04
63	5130008	1	#40 x 40 Tooth Sprocket	40.61
64	5130010	1	Sprocket (w/Set Screws)	18.00
65	5130012	2	Feed Chain Idler Sprocket	37.08
66	5130013	2	Feed Chain Drive Sprocket	41.23
67	5133252	1	Sprocket Retainer Strap	5.32
68	5273204	1	Hitch Clevis Weldment	29.43
69	5274436	1	Parking Stand Weldment	13.57
70	5274623	1	Hub-to-Cam Weldment	59.20
71	5274624	2	Axle Weldment	49.95
72	5274625	1	Bumper Weldment	30.05
73	5274626	2	Floor Chain Tensioner Weldment	19.79
74	5274627	1	Stand Receiver Weldment	18.20
75	5274629	2	Ratchet Pivot Weldment	24.78
76	5274633	1	Tongue Weldment	102.19
77	5274634	1	Riser Plate Sub-Weldment	12.54
78	5274635	1	Slide Mount Plate Weldment	17.04
79	5274636	1	Slide Bar Weldment	14.58
80	5274637	2	Handle Weldment	21.97
81	5274640	1	Paddle Shaft Weldment	135.87
82	5274641	1	Main Frame Weldment (Manure Spreader)	812.08
83	5274644	1	Cam Follower Weldment	17.14
84	5274648	2	Gas Shock Absorber Cylinder w/Eye End Fittings	24.66
85	5274649	1	Feeder Chain Weldment	292.14
86	5274652	1	(R.H.) 6.00-12 AG Tread (4-Ply Tubeless) Tire	181.72
87	5274655	1	(L.H.) 6.00-12 AG Tread (4-Ply Tubeless) Tire	181.72
88	5274656	2	Sprocket & Bushing Assembly	24.10
89	5274669	2	Bearing Housing Assembly	49.58
90	5274670	1	Lower Left Shaft Housing Assembly	54.57
91	5274671	1	Lower Right Shaft Housing Assembly	48.92
92	5274847	1	Sprocket-To-Chain Retainer Plate Weldment	172.91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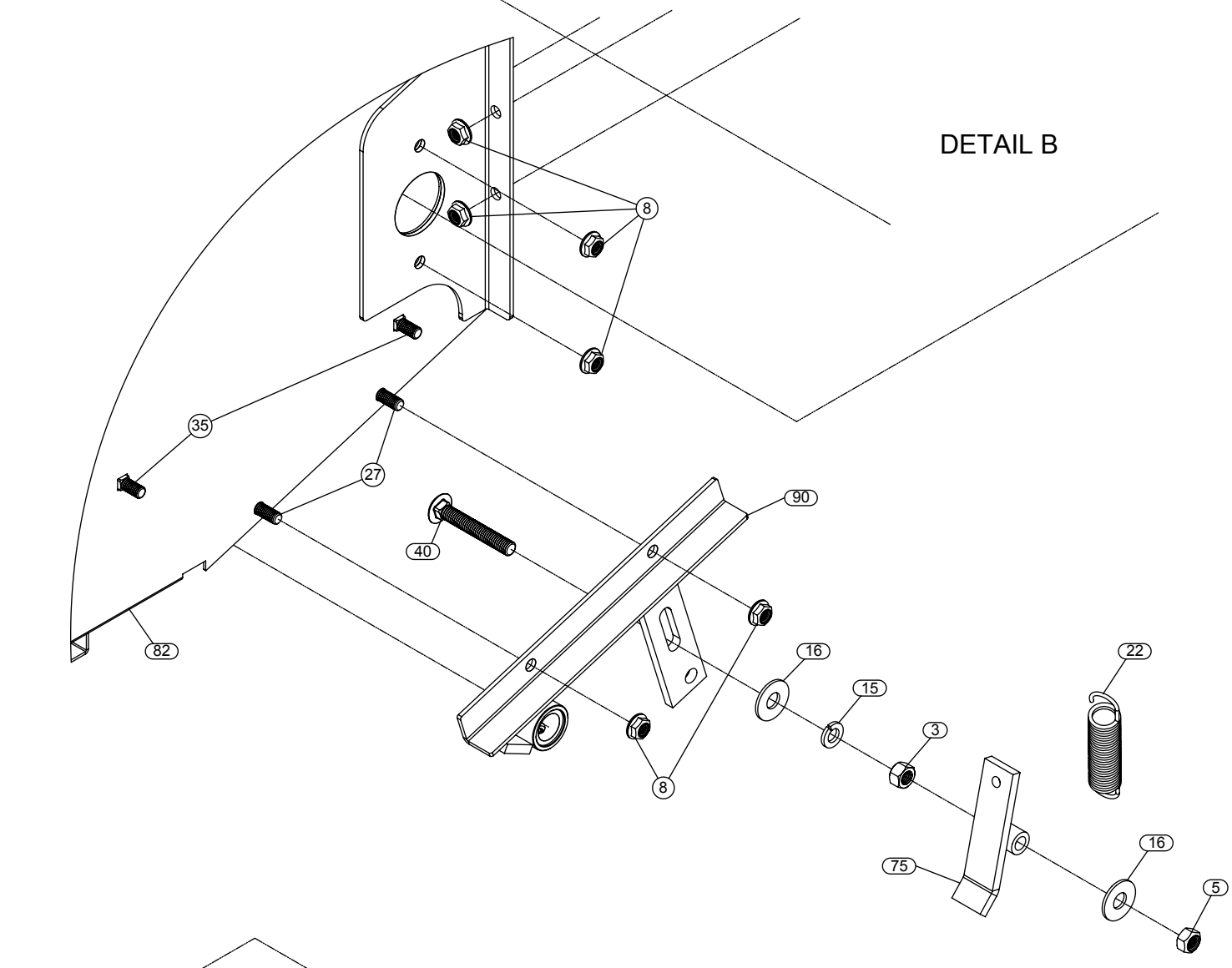
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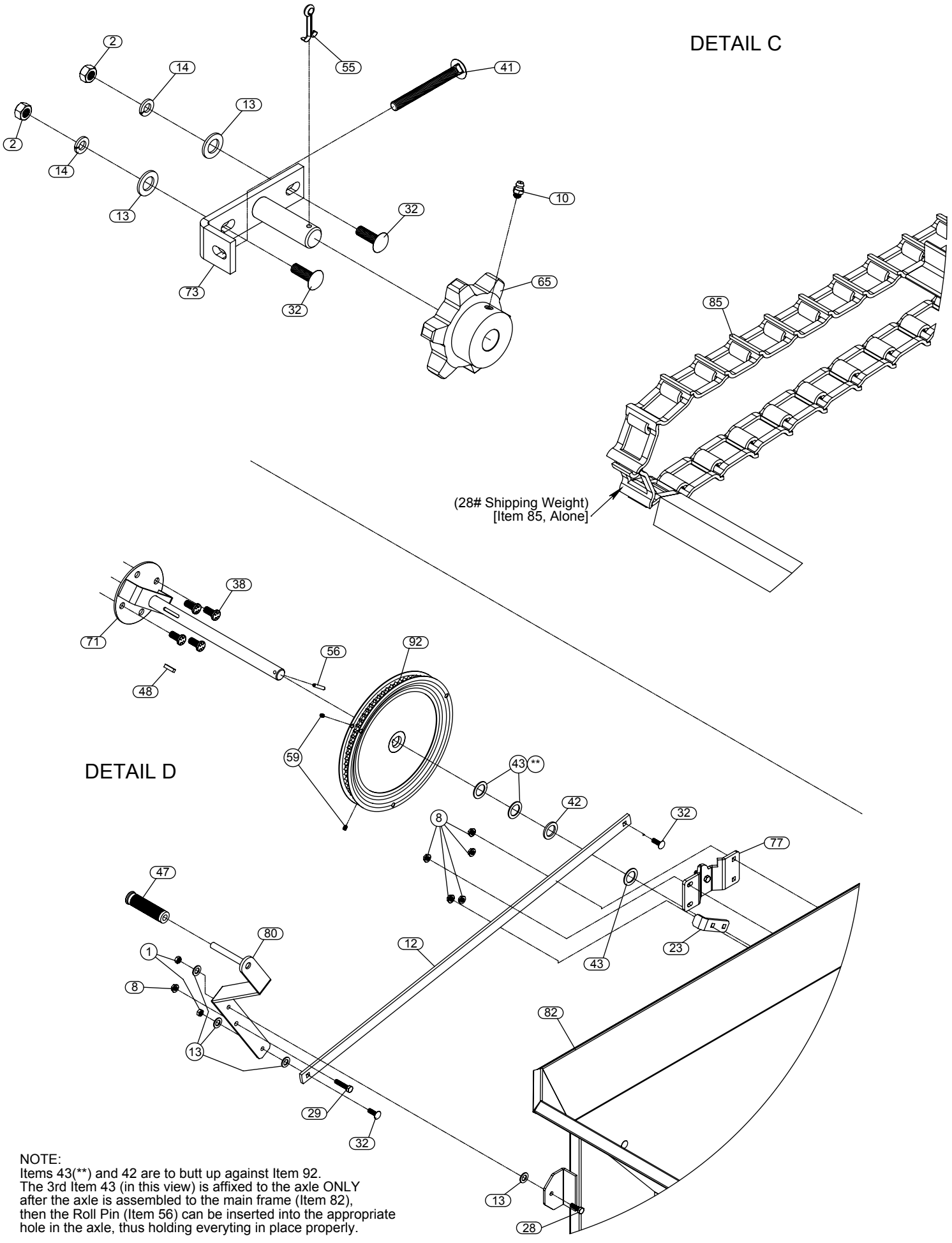
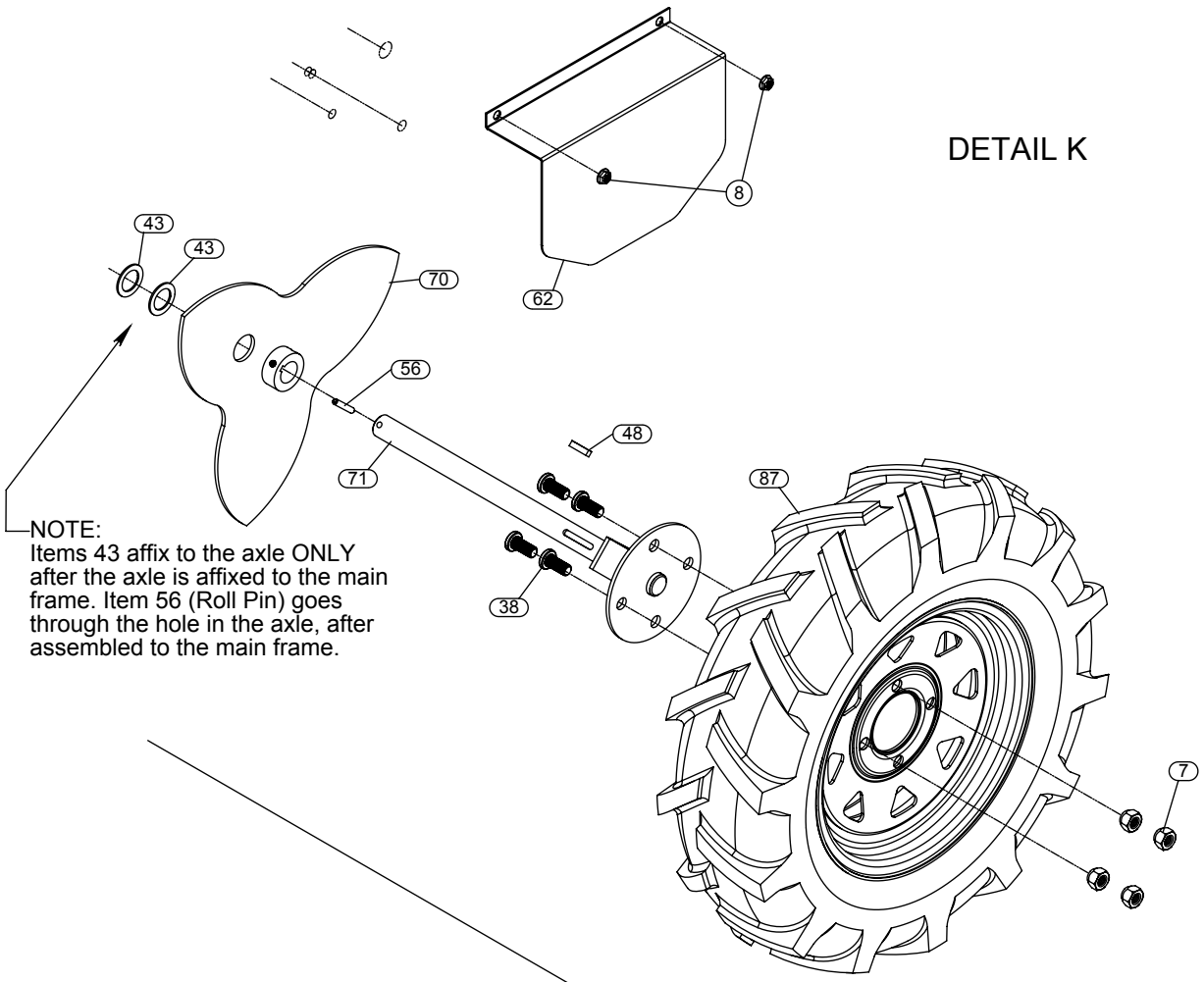


NOTE:
Items 43(**) and 42 are to butt up against Item 92.
The 3rd Item 43 (in this view) is affixed to the axle ONLY after the axle is assembled to the main frame (Item 82), then the Roll Pin (Item 56) can be inserted into the appropriate hole in the axle, thus holding everyting in place properly.


DETAIL K
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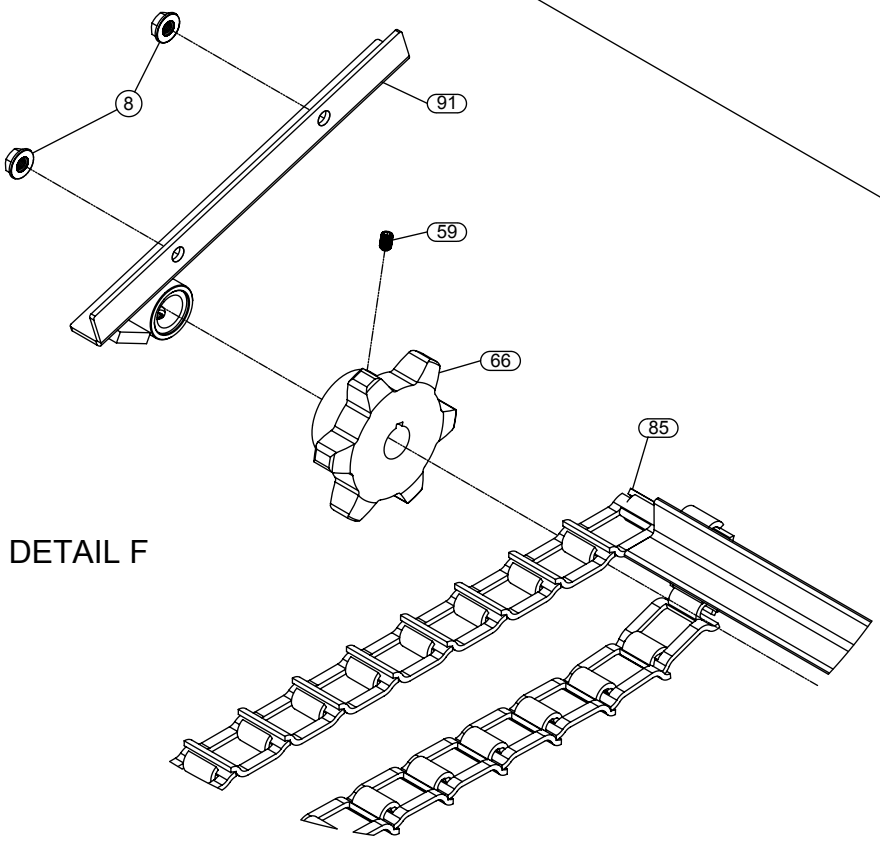
NOTE:
Items 43 affix to the axle ONLY after the axle is affixed to the main frame. Item 56 (Roll Pin) goes through the hole in the axle, after assembled to the main frame.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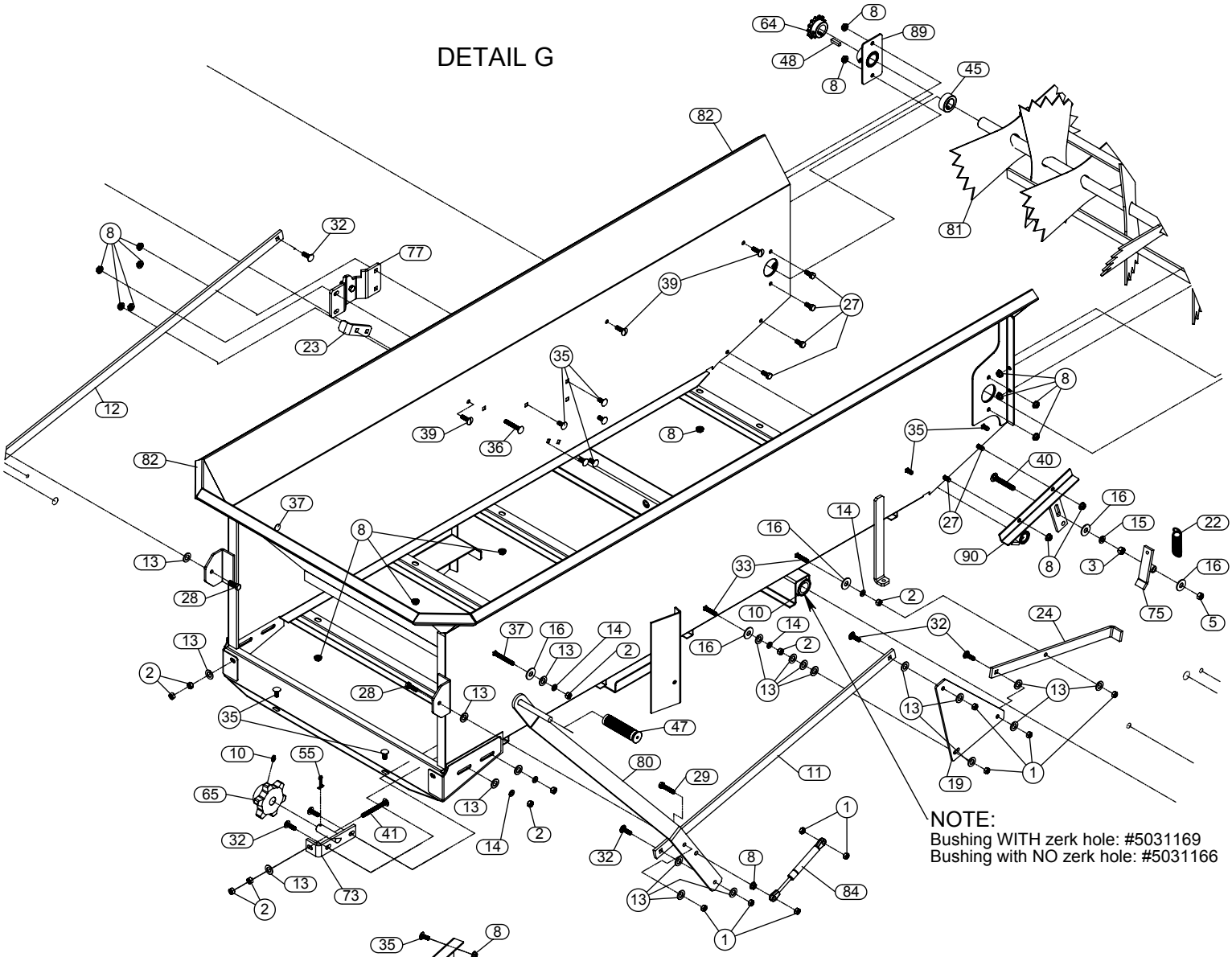
DETAIL F


DETAIL G
NOTE:
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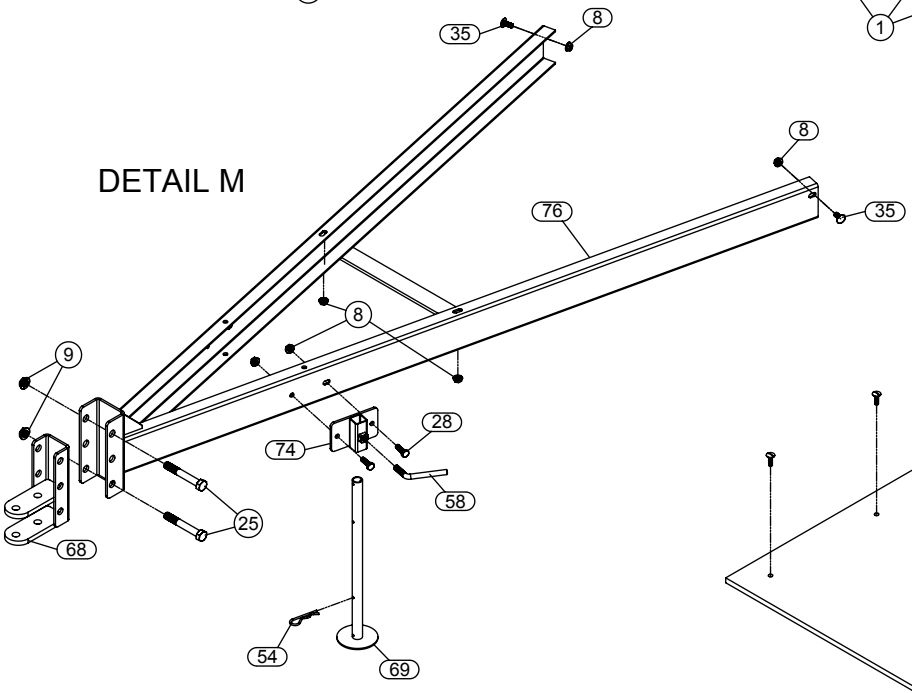
Bushing with NO zerk hole: #5031166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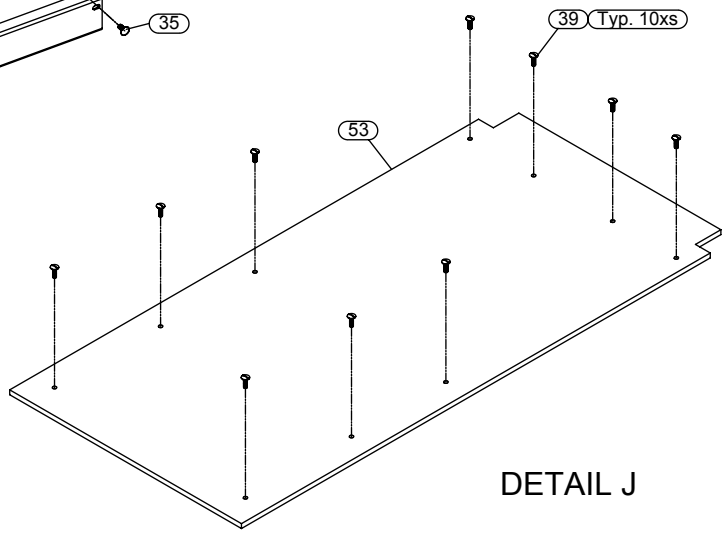
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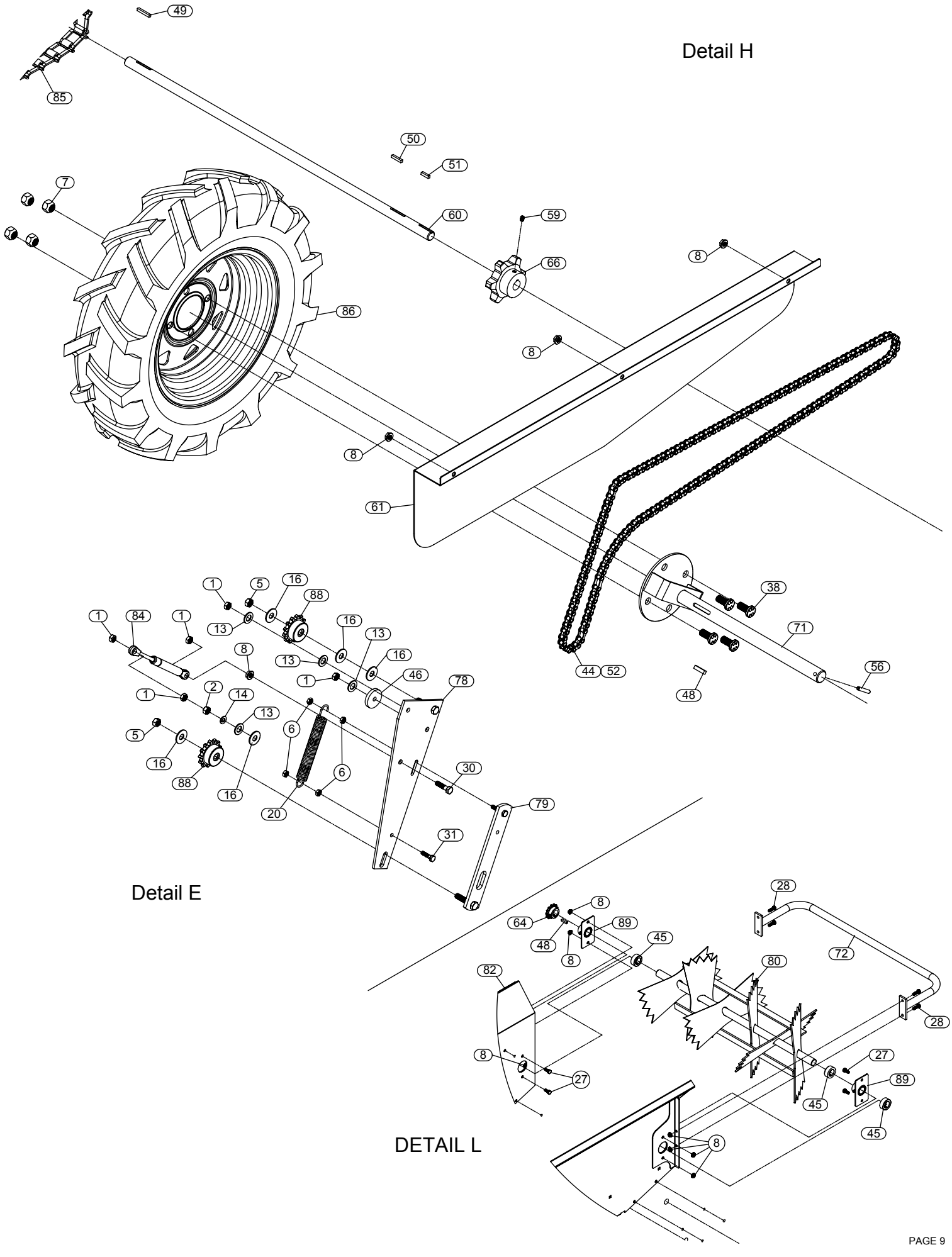
Detail H
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Detail E
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DETAIL L

MS-25BU
Misc Dimensions