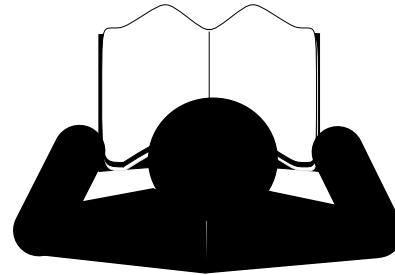


S3T & Reel Update

Using This Manual

This manual was written to help you assemble and prepare the new finishing attachment. The manual includes instructions for assembly and setup. Read this manual and follow the recommendations for safe, efficient and proper assembly and setup.

The information in this manual is current at printing. Some parts may change to assure top performance.



Definitions

The following terms are used throughout this manual.

NOTICE

A crucial point of information related to the preceding topic. Read and follow the directions to remain safe, avoid serious damage to equipment and ensure desired field results.

Note: Useful information related to the preceding topic.

Right-hand and left-hand as used in this manual are determined by facing the direction the machine will travel while in use unless otherwise stated. An orientation rose in some line art illustrations shows the directions of: Up, Back, Left, Down, Front, Right

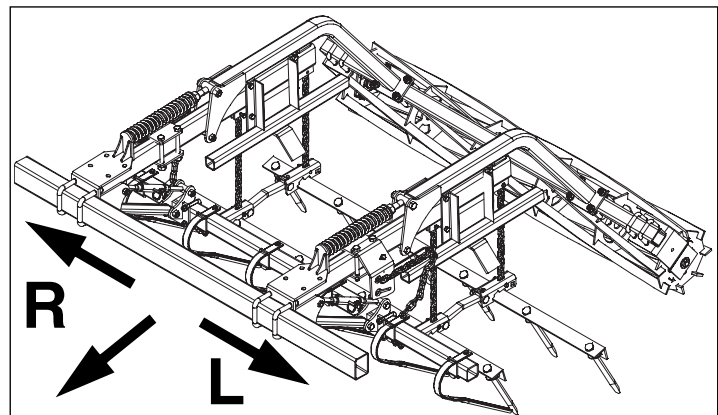
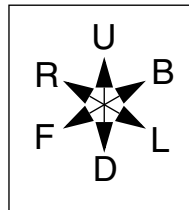


Figure 1
Right / Left

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Models Covered

8318DVN	18-Foot	3-section
8324DVN	24-Foot	3-section
7548DV	48-Foot	5-section
8328DV	28-Foot	3-section
8537DV	37-Foot	5-section
8544DV	44-Foot	5-section

An operator's and parts manual is also provided with the machine or can be viewed on Great Plains web site. Read and understand "**Important Safety Information**" and "**Operating Instructions**" in the operator's manual before assembling the machine. Refer to the parts manual for proper part's identification. As a reference, keep the operator's and part's manual on hand while assembling.

Document Family

550-466M	Operator Manual
550-466P	Parts Manual
550-353M	Operator Manual
550-353P	Parts Manual
550-221M	Operator Manual
550-221P	Parts Manual

Tools Required

- Basic Hand Tools
- Torque Wrench
- Fork Truck, Overhead Hoist or Loader

Pre-assembly Checklist

1. Before assembling, read and understand "Important Safety Information" in front part of operator's manual.
2. Have at least two people on hand while assembling.



Assembly

S3T Bar & Spike Drag

Refer to Figure 2

1. Attach arm assemblies ① to rear bar of machine with 3/4 x 4 1/32 x 4 1/2 u-bolts ②, 3/4 lock washers and nuts.
- Note: See Layout drawings pages 8-16 for proper arm placements.
2. Mount front bar assembly ③ to rear of adjustable link ④ and link ⑤, with 5/8 x 3 1/2 hex bolts ⑥, 5/8 top lock nuts.
3. Attach top of 15 link drag chains ⑦ to bottom side of arm assemblies ① with 3/8 x 1 1/4 hex bolts ⑧ 3/8 lock washers and 3/8 nuts.
4. Slide lower link of 15 link drag chains ⑦ into slot on spike drag bar bracket ⑨, secure with 3/8 x 2 1/2 hex bolt ⑩, and top lock nut.
5. Align holes in harrow link ⑪ with holes in spike drag bar bracket ⑨, secure with 5/8 x 2 7/8 special bolts ⑫ and 5/8 top lock nuts.
6. Attach two plates ⑬ (one on top and one on bottom) of arm assembly ①. Note measurement of 5 5/16" from rear of spring to front of plate ⑬. Attach key hole plate ⑭ to outside of plates key hole plates ⑬. Secure with 5/8 x 6 hex bolts ⑮, 5/8 lock washers and 5/8 nuts.
7. Attach safety chain spring loop ⑯ to inside of key hole plate ⑭ with 1/2 x 1 1/2 hex bolt ⑰, 1/2 flat washer, 1/2 lock washer and 1/2 nut.
8. Attach one end of 25 link pull chain ⑱ to slotted hole in key hole plate ⑭.
9. Attach other end of chain to front drag link assembly ⑲ with 7/16 x 1 1/2 hex bolt ⑳, 7/16 flat washers (one on bolt and one under plate) and 7/16 nylock nut.
10. Attach polyurethane bumper ㉑ to top side of arm assemblies ① with 5/16 x 1/2 hex bolts ㉒ and 5/16 flat washers.
11. Attach front bar mount assembly ㉓ with 1/2 x 2 1/2 x 3 1/2 u-bolts ㉔, 1/2 lock washers and 1/2 nuts.
12. All bolts may be tightened to specs, See "**Torque Values Chart**" on page 22.

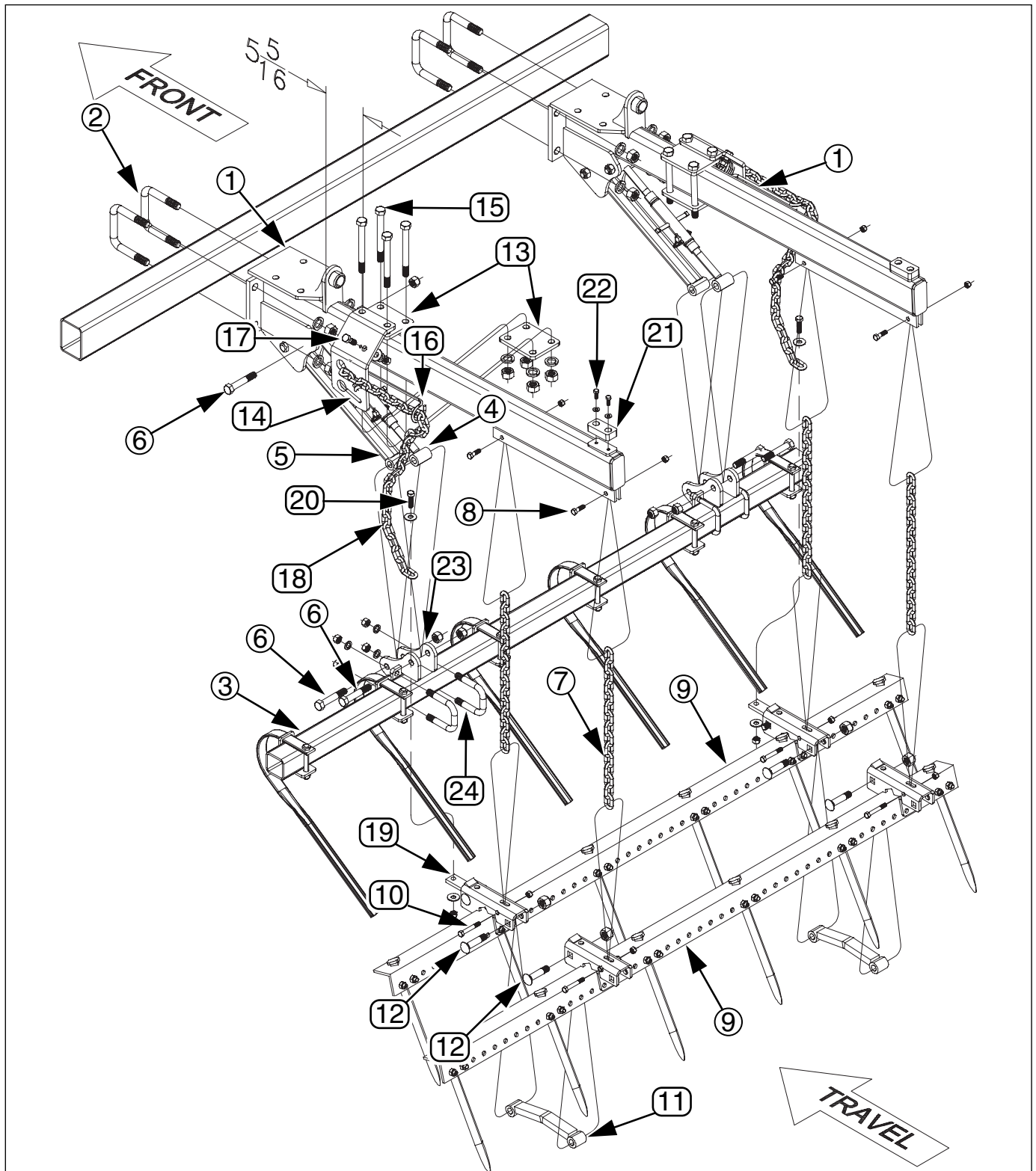


Figure 2
S3T Bar & Spike Drag Assembly

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Reel Following S3T

Refer to Figure 3

1. Slide spring ① over tube of reel arm assembly ②. Align other end of spring ① to tube on front plate of arm assembly ③ and let the rest of the reel arm assembly ② rest on the pad towards rear of arm assembly ③.
2. Secure reel arm assembly ② to arm assembly ③ with 3/4 x 4 hex bolt ④ and 3/4 top lock nut. Tighten top lock nut snug but do not torque as arm needs to pivot.

Note: Adjust nut ⑤ on reel arm assembly ③ snug to hold spring on round tube on front plate of arm assem-

bly ③. When rest of drag is installed, set the pre-load pressure on spring, See “**5-Section Fold Catch Assembly**” on page 8.

Note: See Layout drawings pages 8-16 for proper reel placements.

3. Attach reel assemblies ⑥ to rear plates of reel arm assembly ② with 3/4 x 4 1/32 x 4 1/2 u-bolts ⑦, 3/4 lock washers and 3/4 nuts.
4. All u-bolts may be tightened to specs, See “**Torque Values Chart**” on page 22.

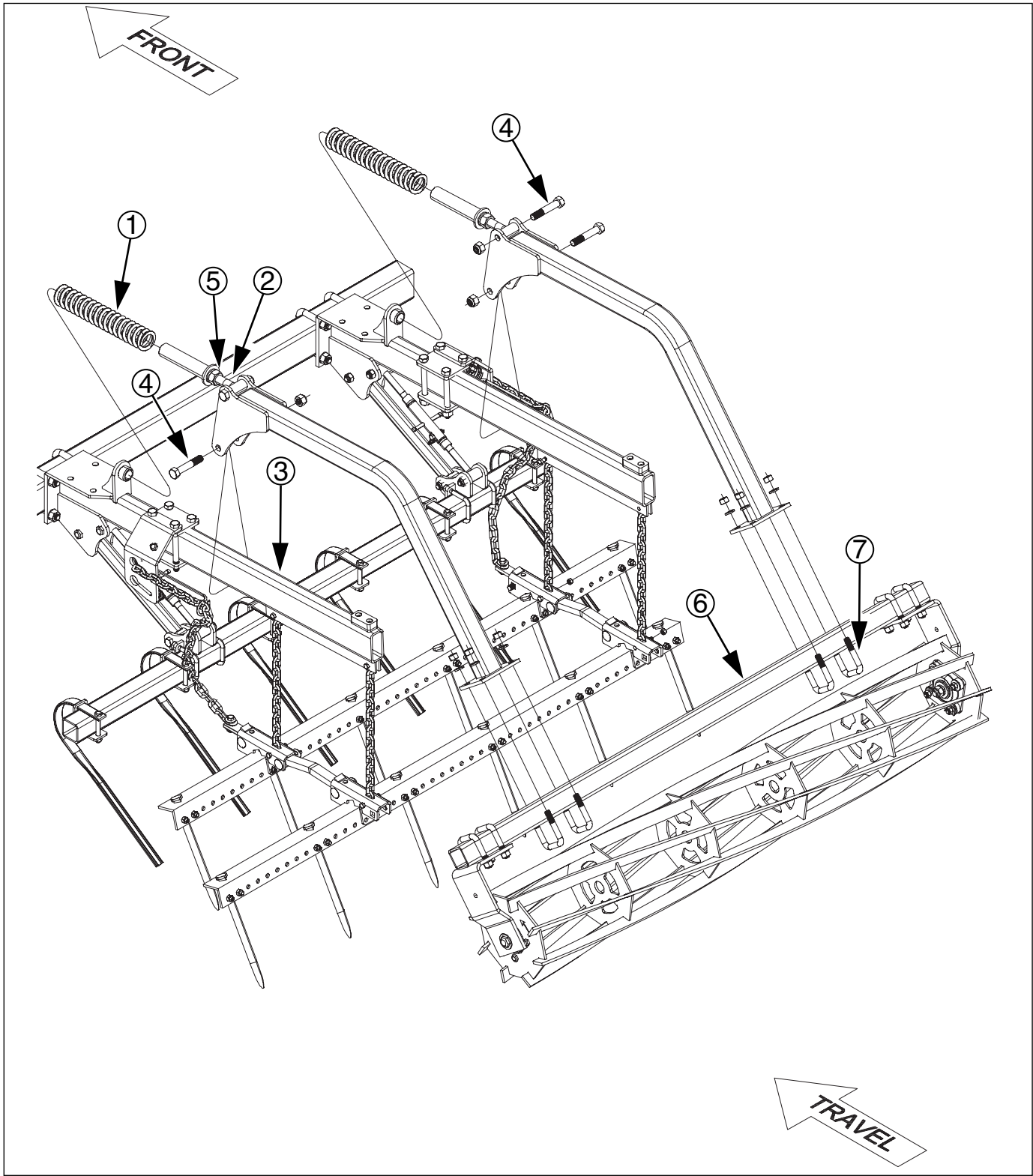


Figure 3
Reel Assembly

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5-Section Fold Catch Assembly

Refer to Figure 3

Note: The catch assembly is only used on 5-section outer wings. Be sure to mount the bent catch towards center of machine on both sides.

1. Attach catch assembly ① to inside of arm assembly with the mounting plates ②. Secure with 1/2 x 3 1/2 hex bolts ③ in top holes and 1/2 x 3 hex bolts ④ in bottom holes, 1/2 lock washers and 1/2 nuts.
2. Align arm assembly 3 7/8" from rear of arm to rear of rear angle iron as shown.
3. All bolts may be tightened to specs, See "**Torque Values Chart**" on page 22.

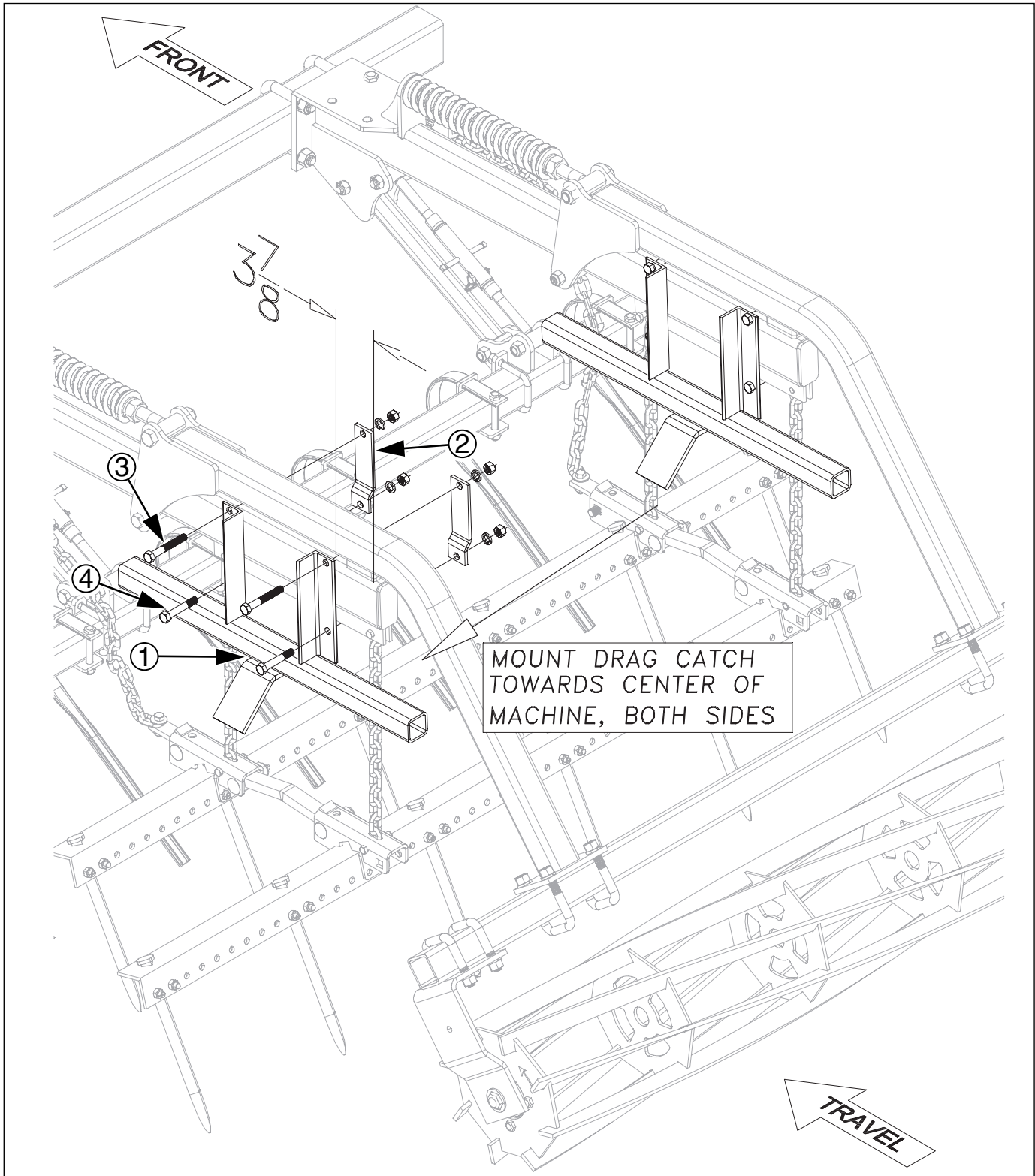


Figure 4
Fold Catch

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Reel Spring Pre-Load

Refer to Figure 5

4. Adjust nut ① to where spring ② is just making contact with front plate ②.
5. Turn nut ① another 1" further on spring rod ④ to set pre-load on spring.

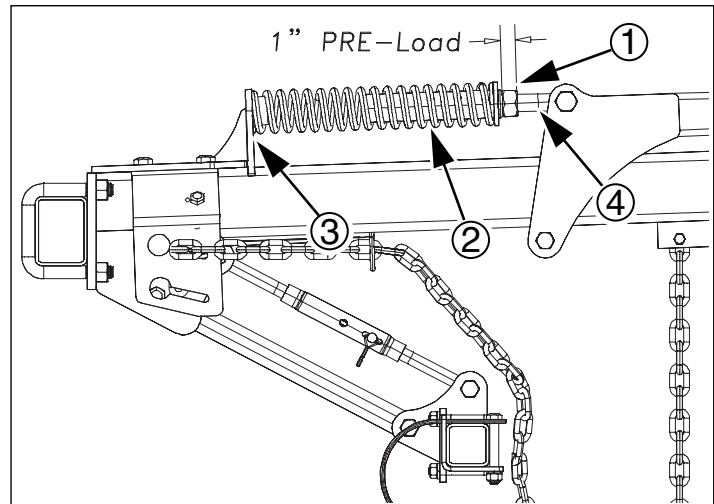
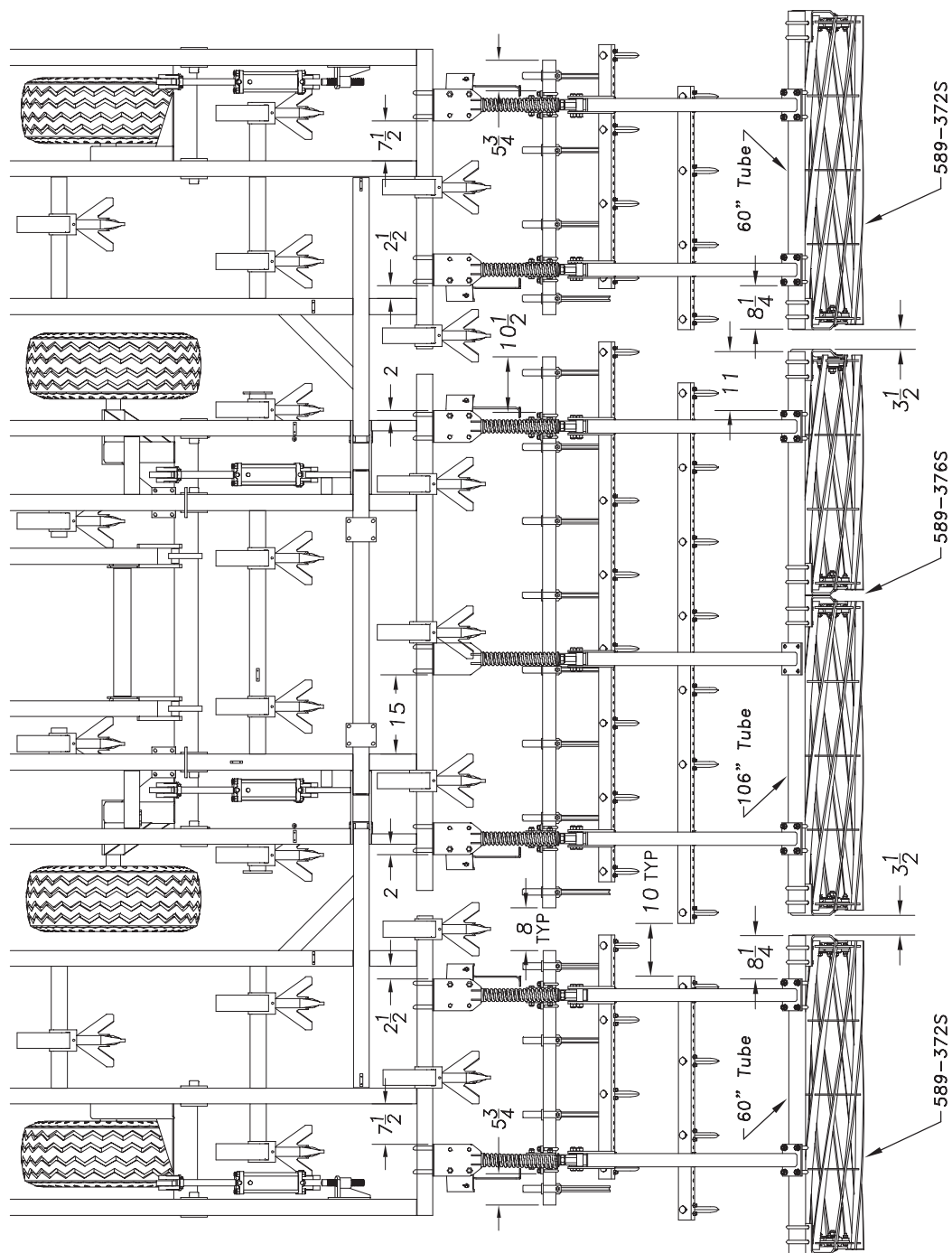


Figure 5
Reel Spring Pre-Load

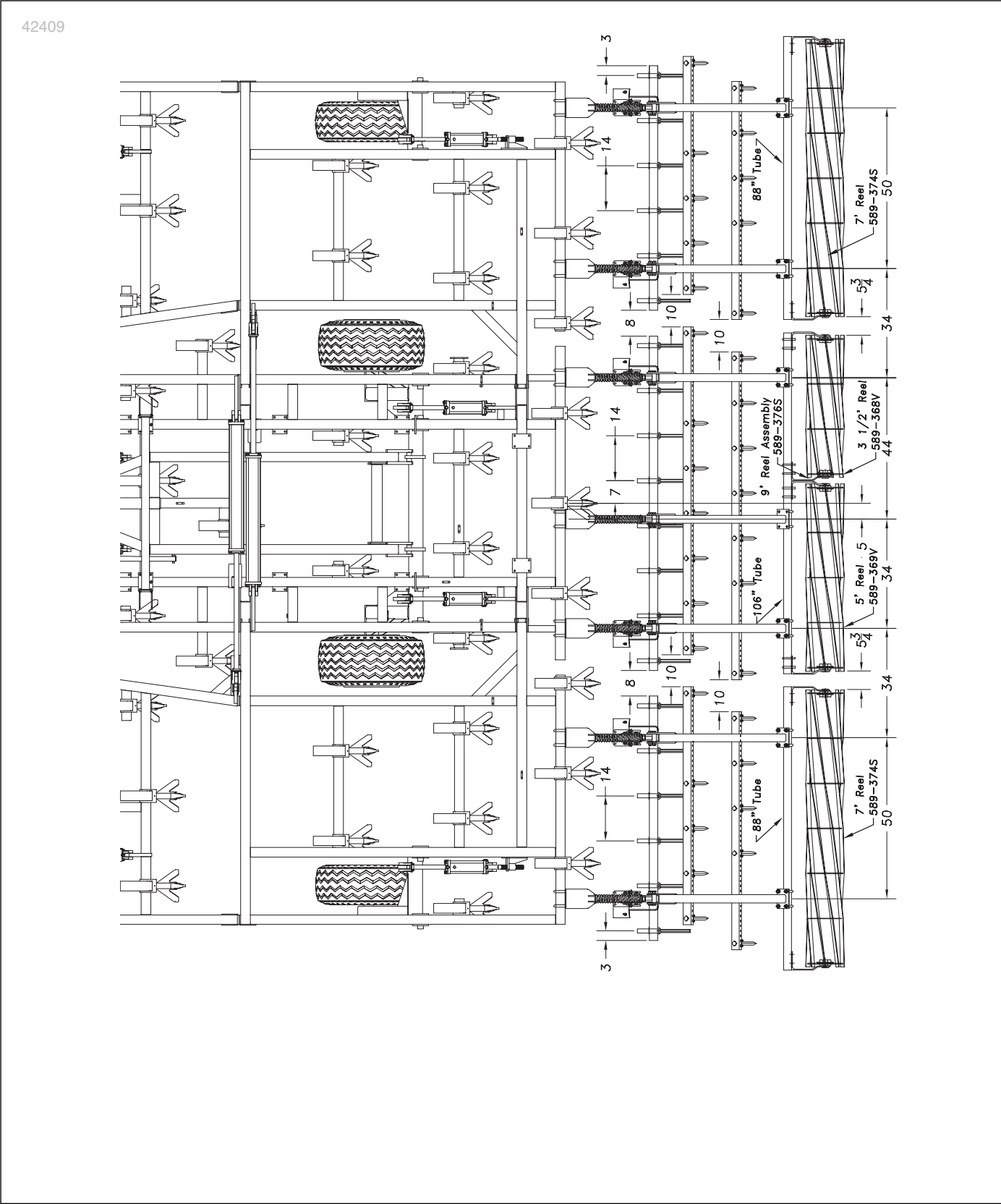
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8318DVN

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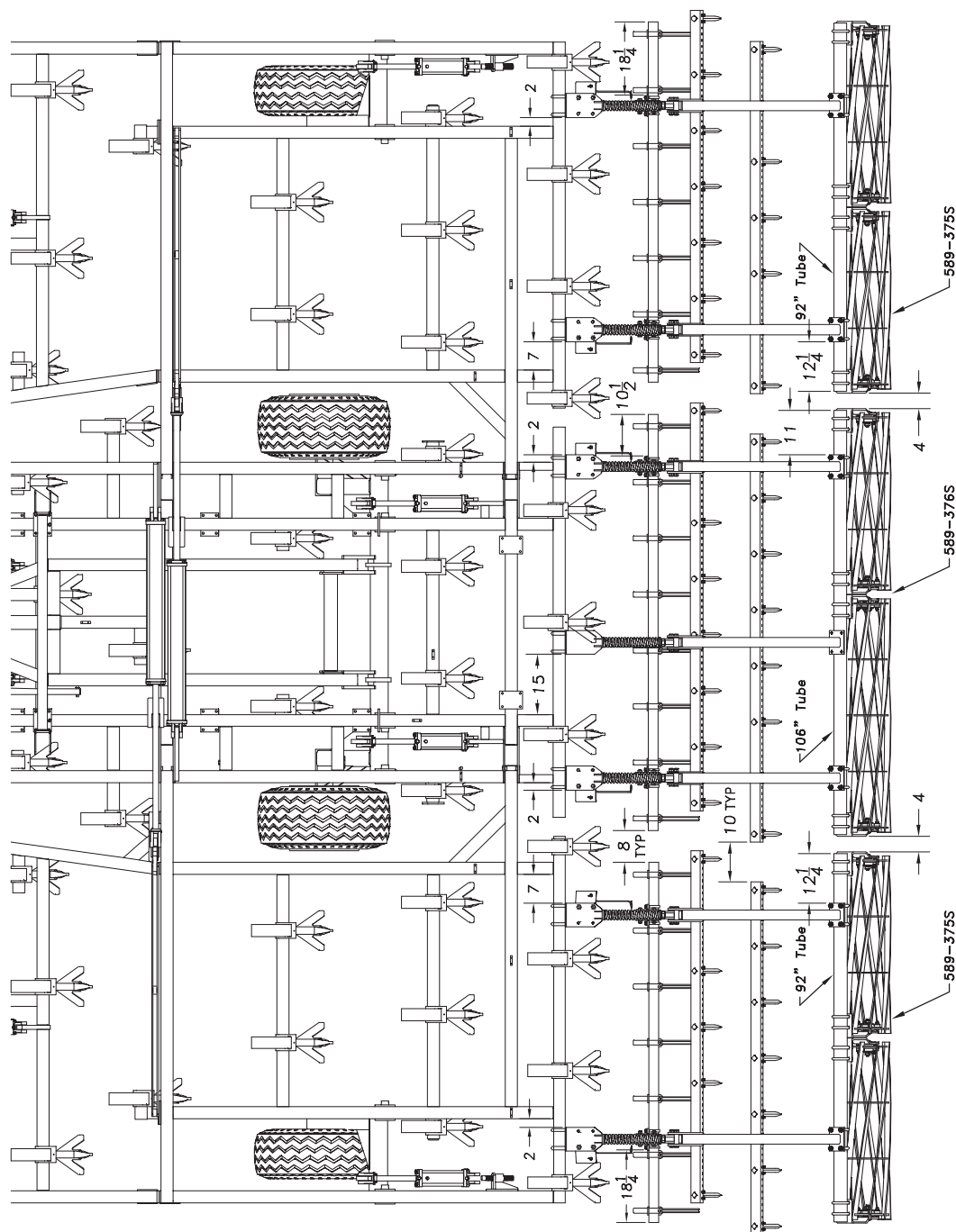


8321DVN



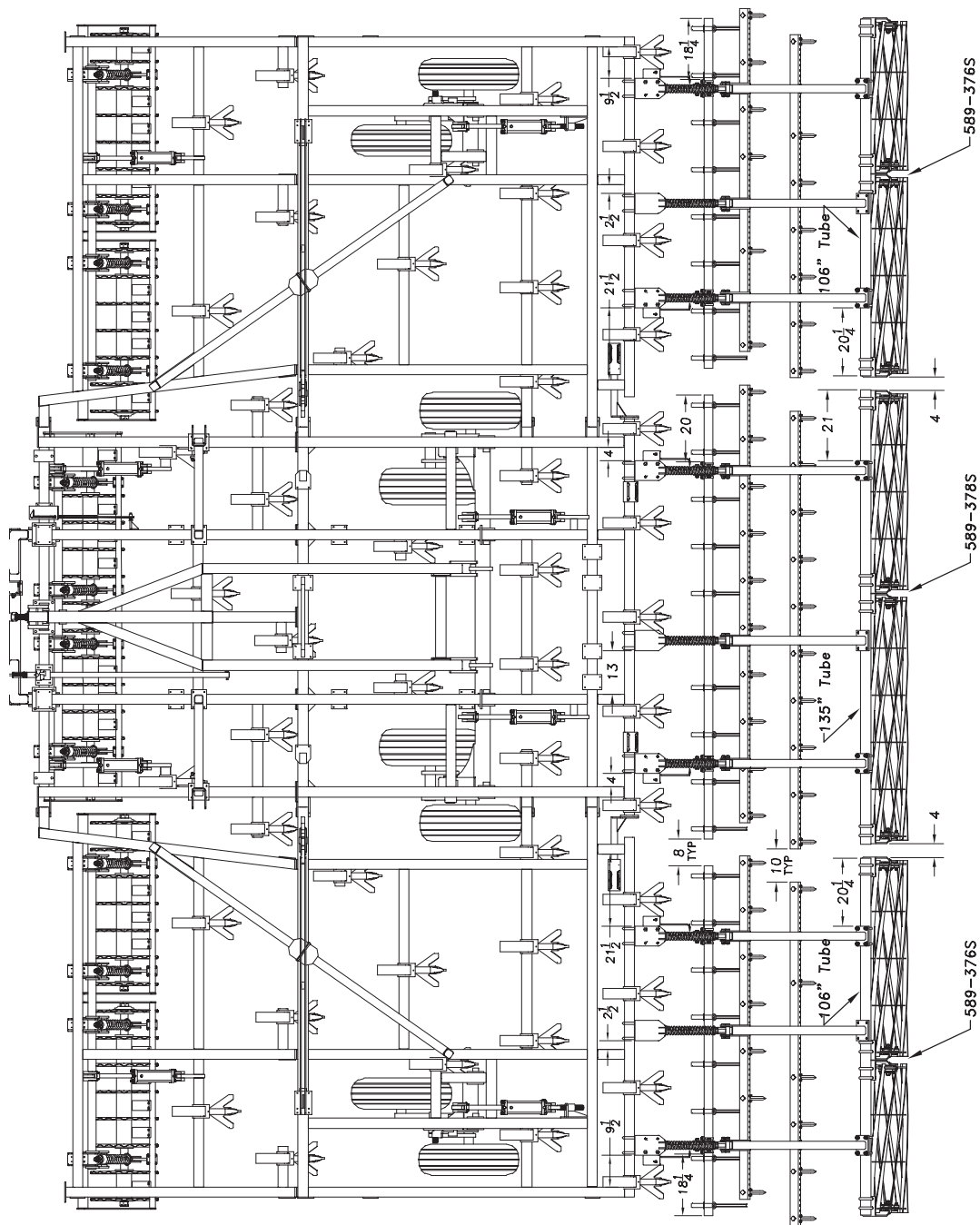
8324DVN

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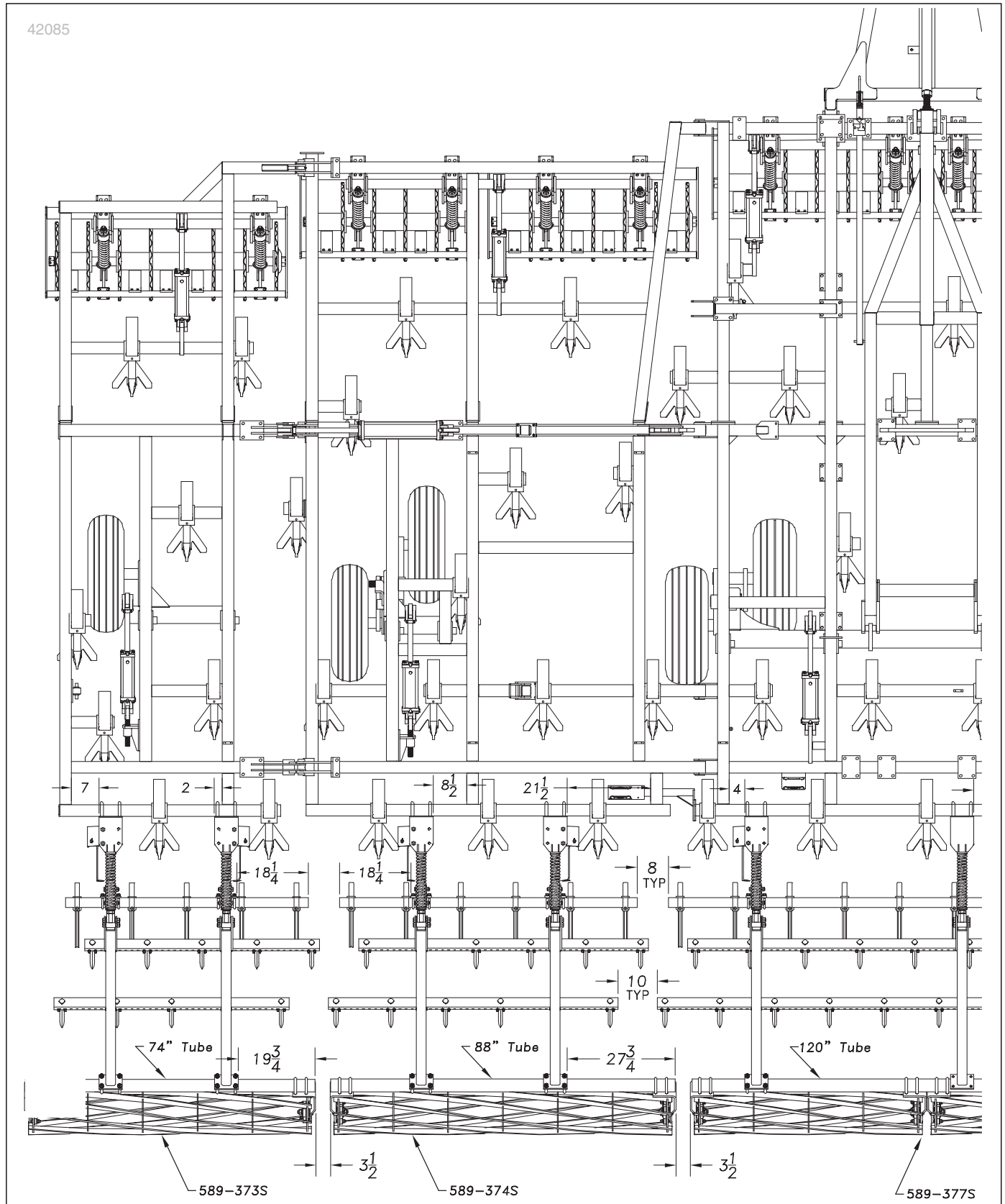
8328DV

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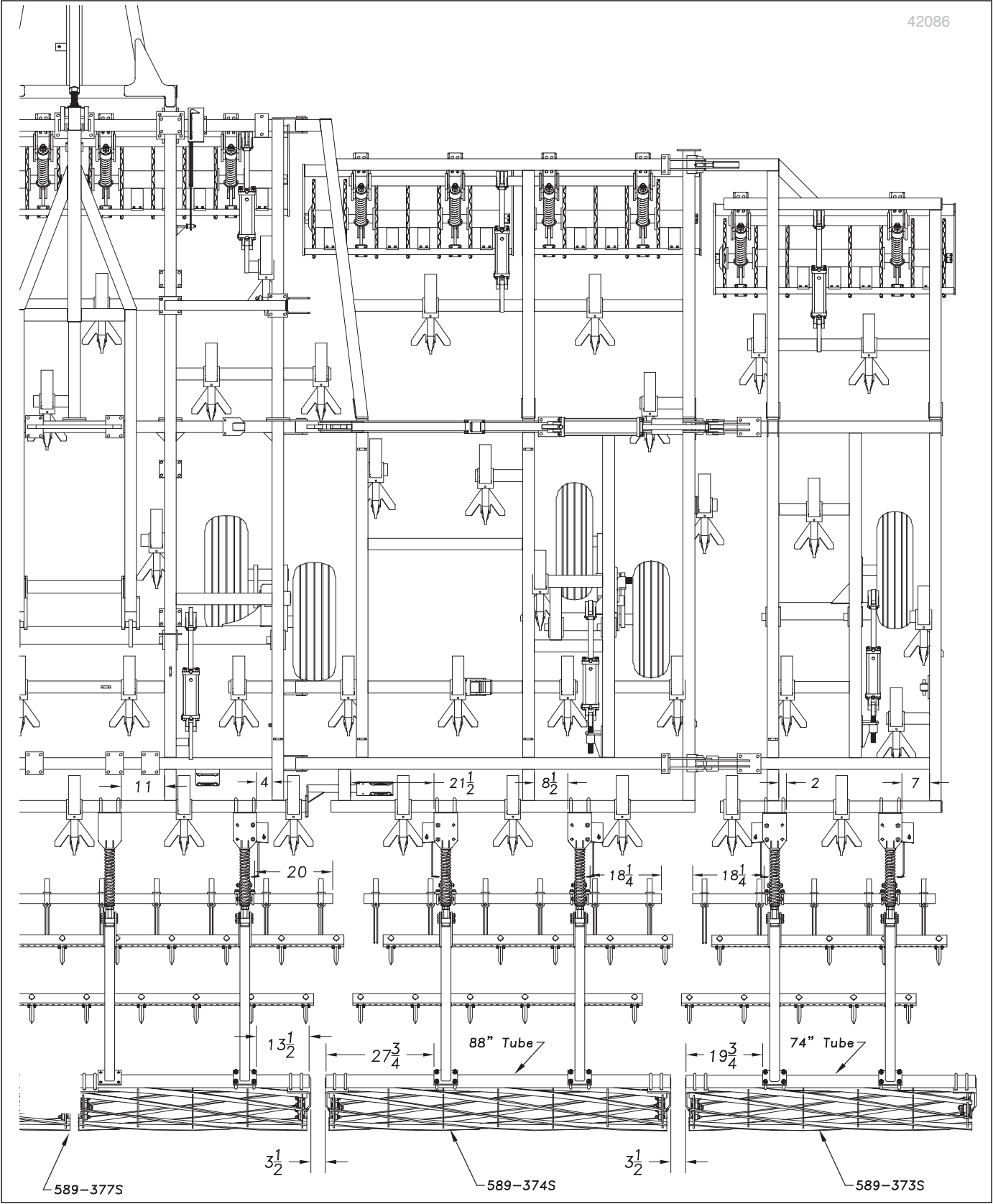
8537DV

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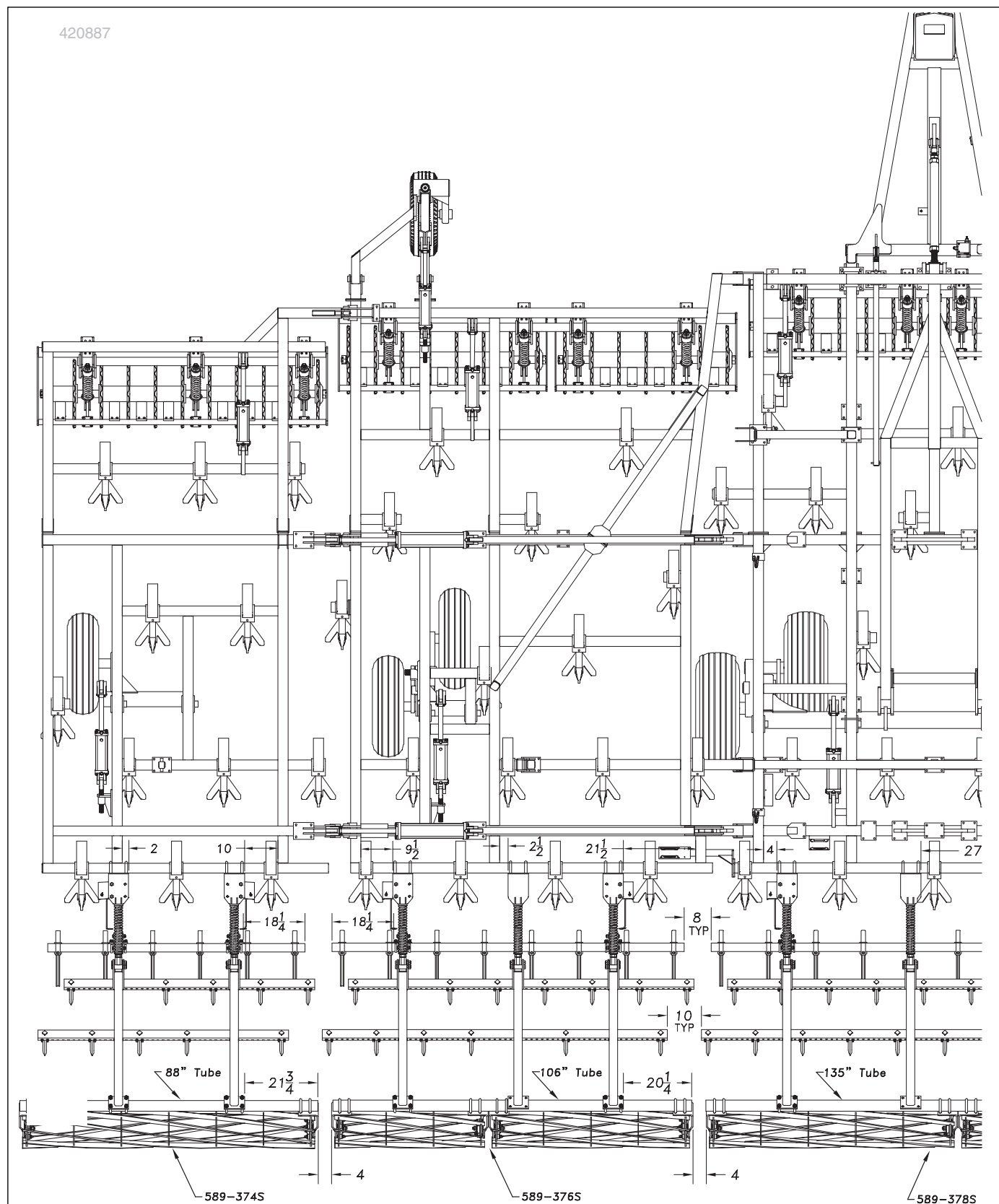
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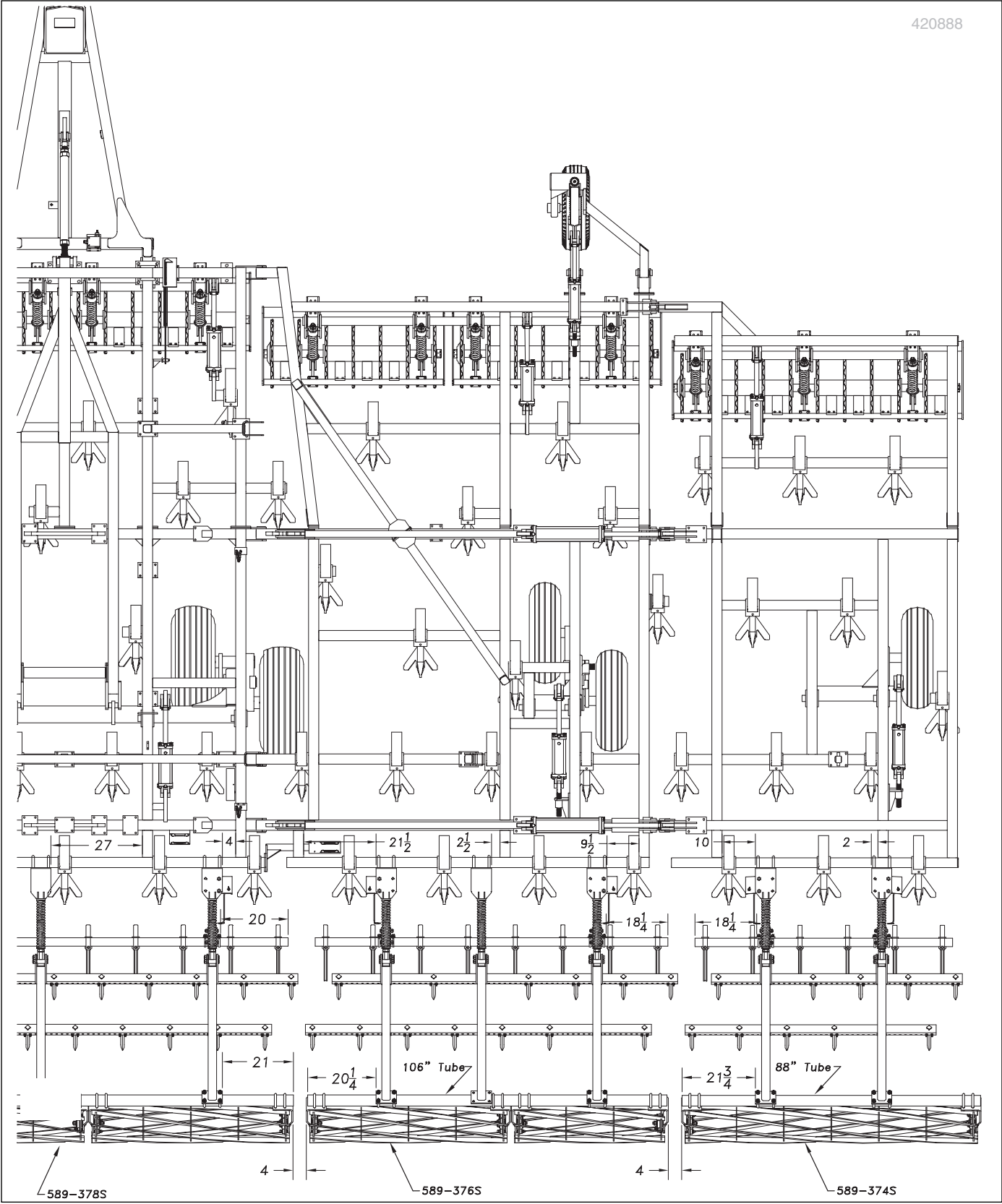
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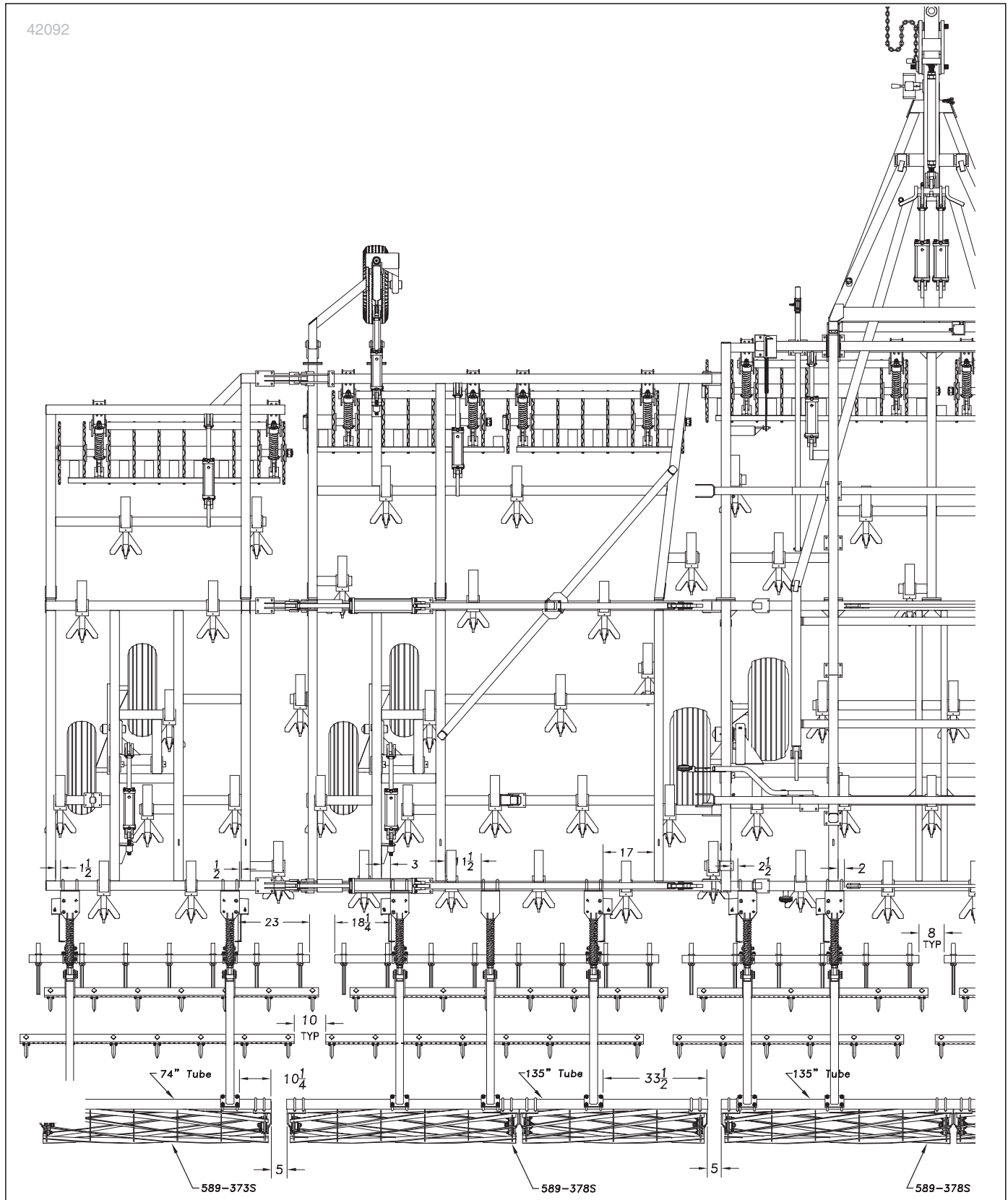
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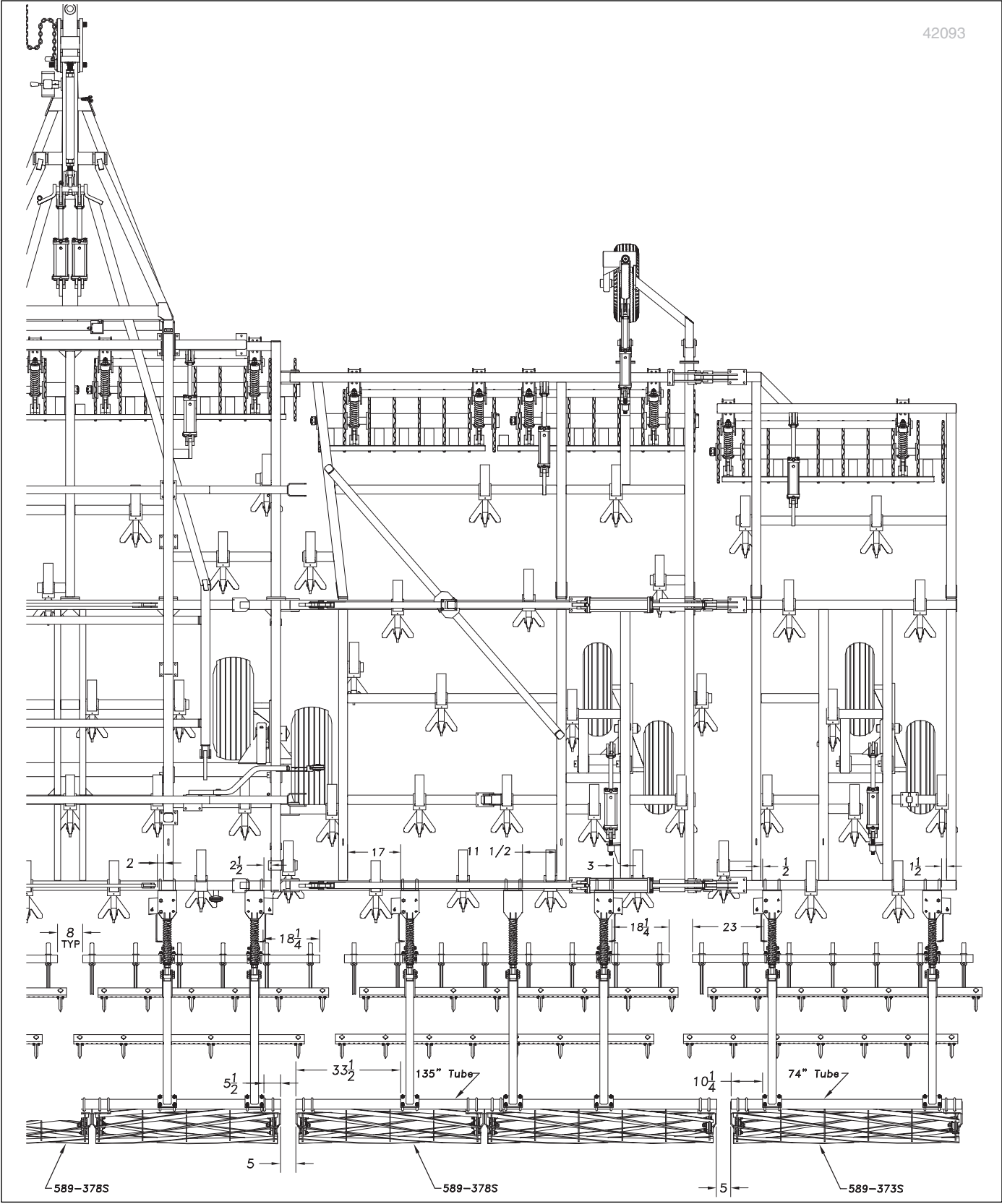
7548DV

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Torque Values Chart

Bolt Size	Bolt Head Identification						
							
	Grade 2	Grade 5	Grade 8				
in-tpi ^a	N-m ^b	ft-lb ^d	N-m	ft-lb	N-m	ft-lb	
1/4-20	7.4	5.6	11	8	16	12	
1/4-28	8.5	6	13	10	18	14	
5/16-18	15	11	24	17	33	25	
5/16-24	17	13	26	19	37	27	
3/8-16	27	20	42	31	59	44	
3/8-24	31	22	47	35	67	49	
7/16-14	43	32	67	49	95	70	
7/16-20	49	36	75	55	105	78	
1/2-13	66	49	105	76	145	105	
1/2-20	75	55	115	85	165	120	
9/16-12	95	70	150	110	210	155	
9/16-18	105	79	165	120	235	170	
5/8-11	130	97	205	150	285	210	
5/8-18	150	110	230	170	325	240	
3/4-10	235	170	360	265	510	375	
3/4-16	260	190	405	295	570	420	
7/8-9	225	165	585	430	820	605	
7/8-14	250	185	640	475	905	670	
1-8	340	250	875	645	1230	910	
1-12	370	275	955	705	1350	995	
1 1/8-7	480	355	1080	795	1750	1290	
1 1/8-12	540	395	1210	890	1960	1440	
1 1/4-7	680	500	1520	1120	2460	1820	
1 1/4-12	750	555	1680	1240	2730	2010	
1 3/8-6	890	655	1990	1470	3230	2380	
1 3/8-12	1010	745	2270	1670	3680	2710	
1 1/2-6	1180	870	2640	1950	4290	3160	
1 1/2-12	1330	980	2970	2190	4820	3560	

Bolt Size	Bolt Head Identification						
							
	Class 5.8	Class 8.8	Class 10.9				
mm x pitch ^c	N-m	ft-lb	N-m	ft-lb	N-m	ft-lb	
M 5 X 0.8	4	3	6	5	9	7	
M 6 X 1	7	5	11	8	15	11	
M 8 X 1.25	17	12	26	19	36	27	
M 8 X 1	18	13	28	21	39	29	
M10 X 1.5	33	24	52	39	72	53	
M10 X 0.75	39	29	61	45	85	62	
M12 X 1.75	58	42	91	67	125	93	
M12 X 1.5	60	44	95	70	130	97	
M12 X 1	90	66	105	77	145	105	
M14 X 2	92	68	145	105	200	150	
M14 X 1.5	99	73	155	115	215	160	
M16 X 2	145	105	225	165	315	230	
M16 X 1.5	155	115	240	180	335	245	
M18 X 2.5	195	145	310	230	405	300	
M18 X 1.5	220	165	350	260	485	355	
M20 X 2.5	280	205	440	325	610	450	
M20 X 1.5	310	230	650	480	900	665	
M24 X 3	480	355	760	560	1050	780	
M24 X 2	525	390	830	610	1150	845	
M30 X 3.5	960	705	1510	1120	2100	1550	
M30 X 2	1060	785	1680	1240	2320	1710	
M36 X 3.5	1730	1270	2650	1950	3660	2700	
M36 X 2	1880	1380	2960	2190	4100	3220	

a. in-tpi = nominal thread diameter in inches-threads per inch

b. N·m = newton-meters

c. mm x pitch = nominal thread diameter in mm x thread pitch

d. ft·lb = foot pounds

a. in-tpi = nominal thread diameter in inches-threads per inch

b. N·m = newton-meters

c. mm x pitch = nominal thread diameter in mm x thread pitch

d. ft-lb = foot pounds

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.

25199

Disc or Coulter Gang Bolt Torque 1 1/2"-6 650-750 Foot-pounds (175 lbs on 4' cheater).