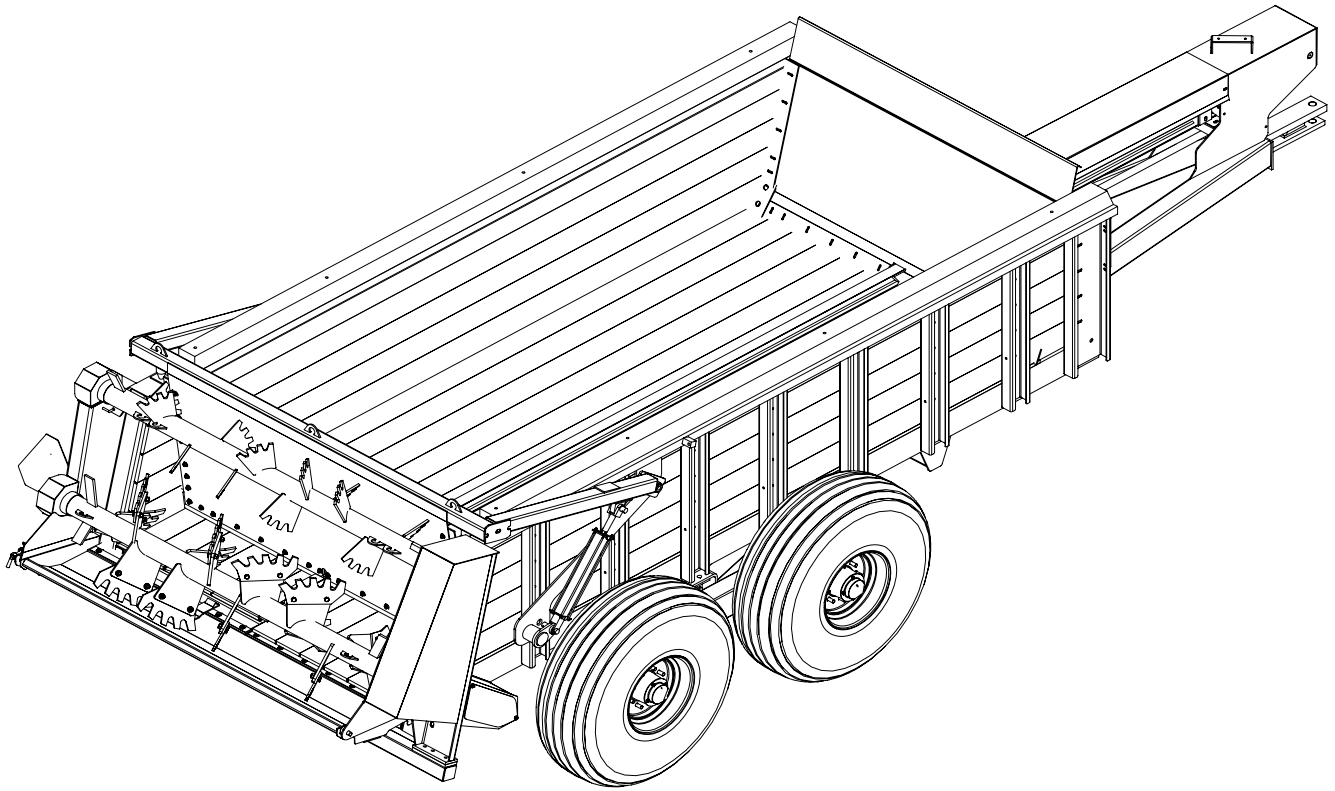
Hagedorn Parts Manual

Model 227

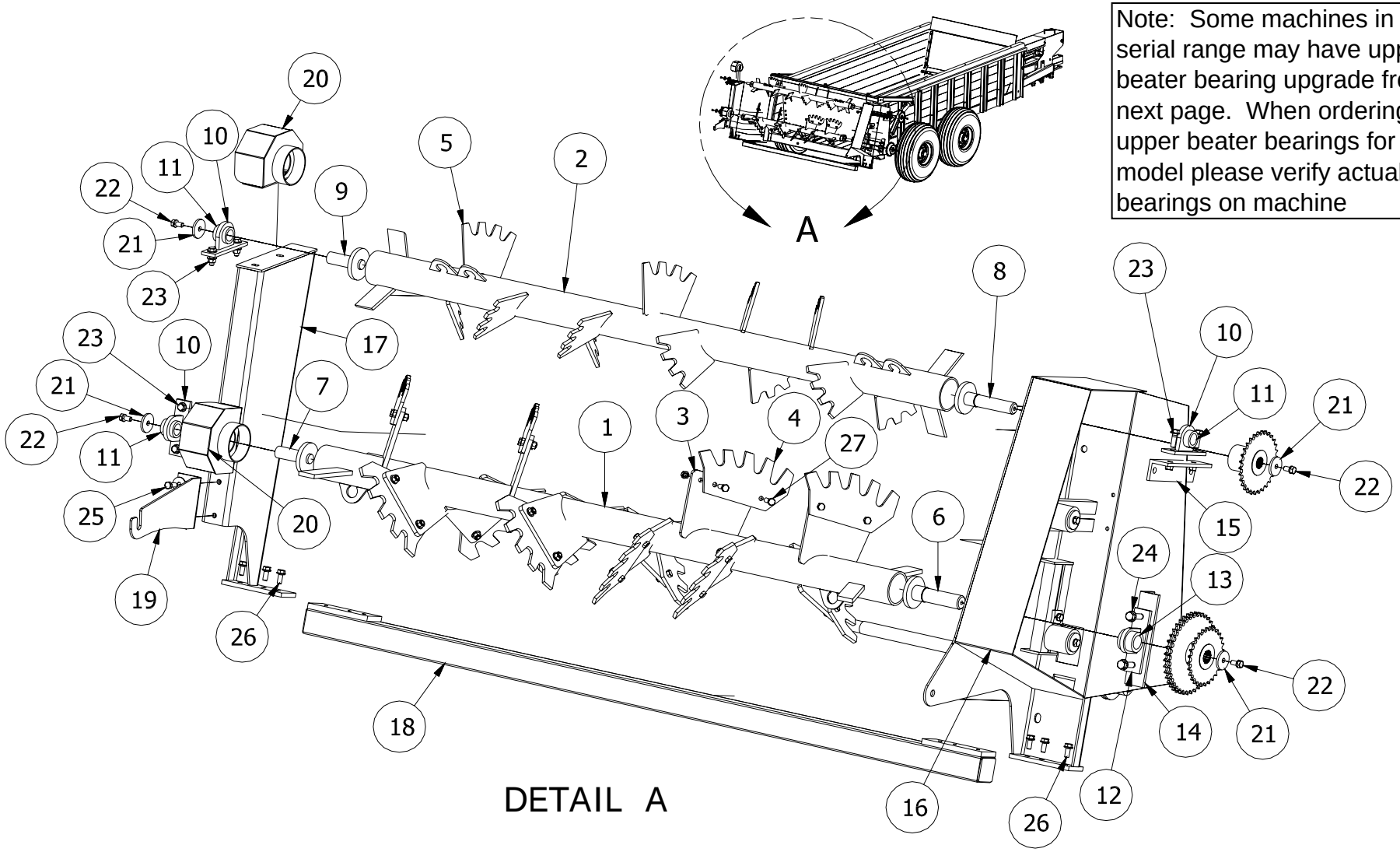


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Beater Assembly, SN 5129-On.....1.3
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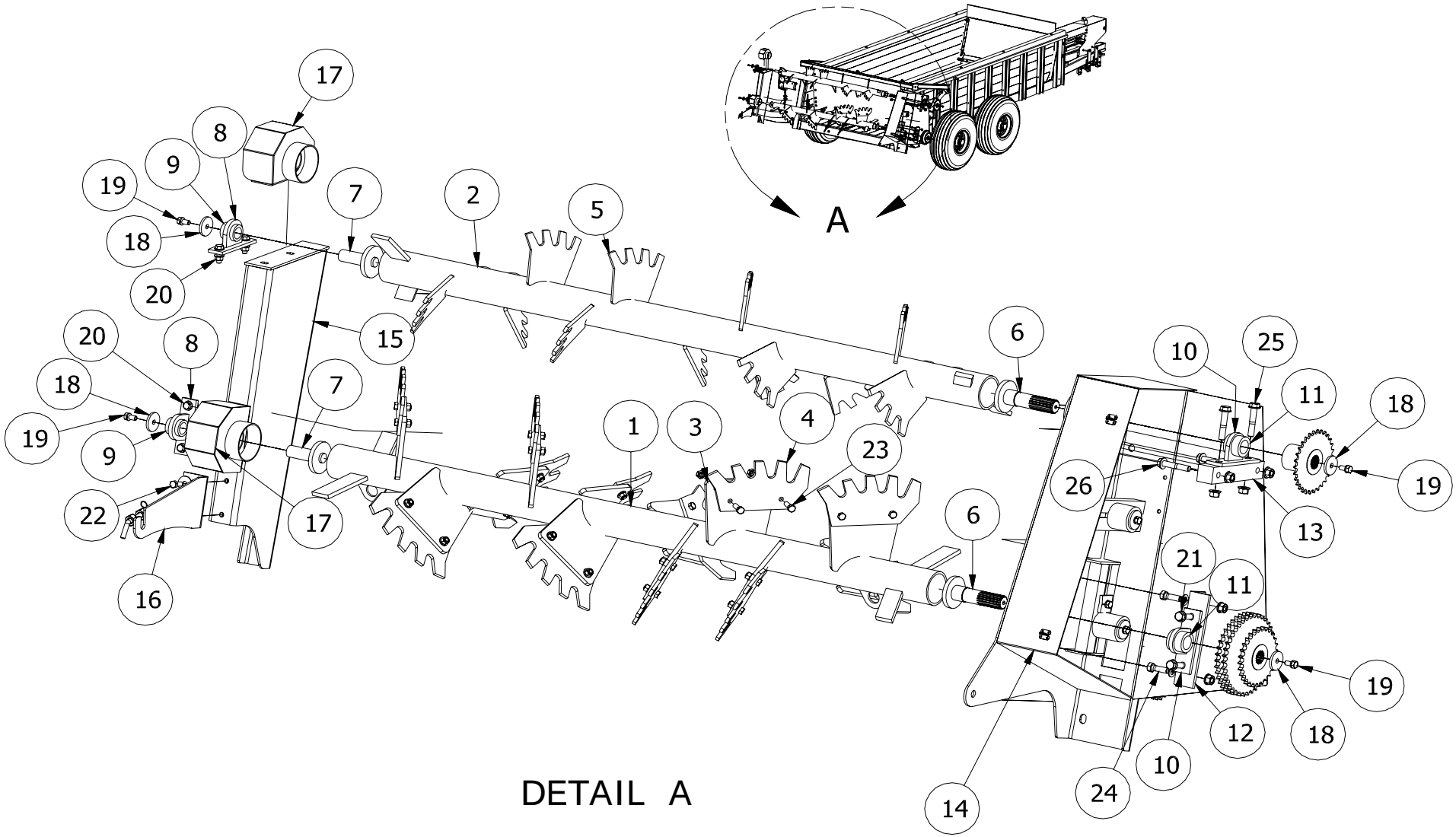
Beater Assembly, Serial 4472 - 5066	1.1
Beater Assembly, Serial 5129 - On	1.3
Beater Stub shaft and Bearing upgrade	1.5
Beater Frame Attaching	1.7

key	Qty	Description	Part Number
1	1	Complete main beater	20082
2	1	Complete upper beater	20083
3	12	Weld-on paddle, main beater	73130-S
4	12	Replacable paddle section, main beater	73007-S
5	12	Weld-on paddle, upper beater	73009-S
6	1	Drive side stub shaft and disc, main beater	86220
7	1	Idler side stub shaft and disc, main beater	86200
8	1	Drive side stub shaft and disc, upper beater	86210
9	1	Idler side stub shaft and disc, upper beater	86200
10	3	Bearing housing, Pillow block, Idle side and upper beater drive side	76371
11	3	Bearing insert, Idle side and upper beater drive side	76372
	3	Bearing Assembly, idle side & upper beater drive, pillow block, Includes keys 10 & 11	76370
12	1	Bearing housing, Pillow block, Main beater drive side	76391
13	1	Bearing insert, Main beater drive side	76392
	1	Bearing assembly, main beater drive, pillow block, Includes keys 12 & 13	76390
14	1	Main beater bearing bracket	70359
15	1	Upper beater bearing bracket	70358
16	1	Beater frame, drive side	20163
17	1	Beater frame, idle side	20085
18	1	Beater frame cross-member	N/A
19	1	Beater pan mounting bracket	74524
20	2	Idle side bearing cover	20007
21	4	Beater retainer (Special Heavy Washer)	79029
22	AR	Bolts	1/2 x 1 (4), lockwasher (4)
23	AR	Bolts	1/2 x 1 3/4 (6), SAE flat washer (12), locknut (6)
24	AR	Bolts	5/8 x 2 (2), SAE flat washer (4), locknut (2)
25	AR	Bolts	1/2 x 1 1/4 (2), USS flat washer (4), locknut (2)
26	AR	Bolts	1/2 x 1 1/4 (6), lockwasher (6)
27	AR	Bolts	1/2 x 1 1/2 (24), locknut (24)

Note: Some machines in this serial range may have upper beater bearing upgrade from next page. When ordering upper beater bearings for this model please verify actual bearings on machine

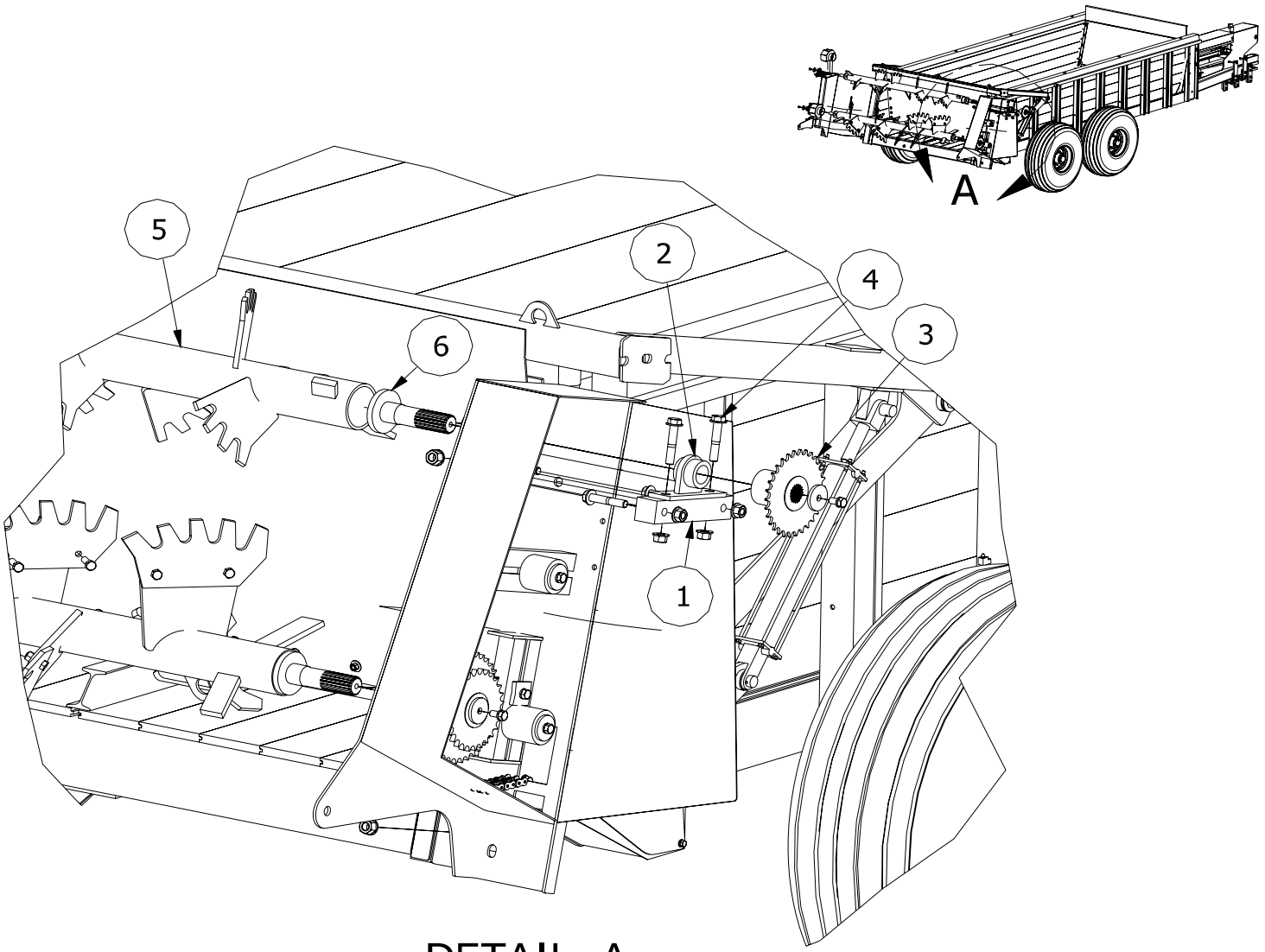


key	Qty	Description	Part Number
1	1	Complete main beater	20082
2	1	Complete upper beater	20122
3	12	Weld-on paddle, main beater	73130-S
4	12	Replacable paddle section, main beater	73007-S
5	12	Weld-on paddle, upper beater	73009-S
6	2	Drive side stub shaft and disc	86220
7	2	Idler side stub shaft and disc	86200
8	2	Bearing housing, Pillow block, Idle side and upper beater drive side	76371
9	2	Bearing insert	76372
	2	Bearing Assembly, pillow block and insert, Includes keys 8 and 9	76370
10	2	Bearing housing, Pillow block	76391
11	2	Bearing insert	76392
	2	Bearing assembly, pillow block and insert, Includes keys 10 and 11	76390
12	1	Main beater bearing bracket	70359
13	1	Upper beater bearing bracket	70465
14	1	Beater frame, drive side	20084
15	1	Beater frame, idle side	20085
16	1	Beater pan mounting bracket	74524
17	2	Idle side bearing cover	20007
18	4	Beater retainer (Special Heavy Washer)	79029
19	AR	Bolts	1/2 x 1 (4), lockwasher (4)
20	AR	Bolts	1/2 x 1 3/4 (6), SAE flat washer (12), locknut (6)
21	AR	Bolts	5/8 x 2 1/2 (2), SAE flat washer (4), locknut (2)
22	AR	Bolts	1/2 x 1 1/4 (2), USS flat washer (4), locknut (2)
23	AR	Bolts	1/2 x 1 1/2 (24), locknut (24)
24	AR	Bolts	5/8 x 1 3/4 (2), SAE flat washer (4), locknut (2)
25	AR	Bolts	5/8 x 4 (2), SAE flat washer (4), locknut (2)
26	AR	Bolts	5/8 x 3 1/2 (2), SAE flat washer (4), locknut (2)


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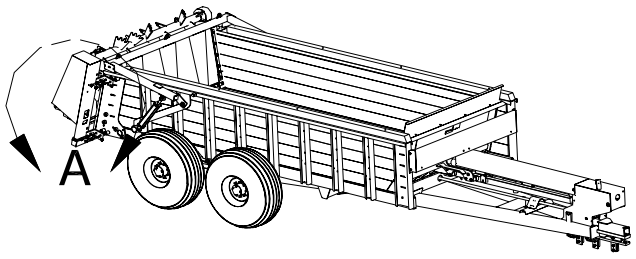
Beater stub shaft and bearing upgrade. This optional upgrade applies to 227's and 277's between serial 4469 and 5117. It is recommended in all cases of beater replacement or drive side stub shaft replacement. For more information call 1-800-707-7271

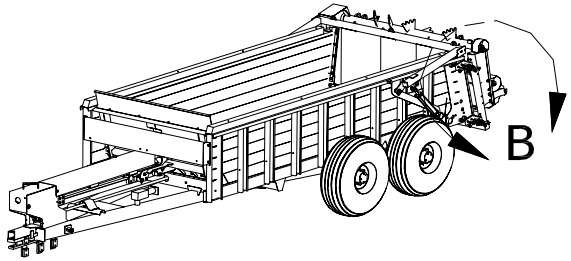
key	Qty	Description	Part Number
1	1	Bearing Bracket	70465
2	1	Bearing Assembly	76390
		Bearing Housing	76391
		Bearing Insert	76392
3	1	Sprocket	76127
4	AR	Bolts — 5/8 x 3 1/2 (4), 5/8 SAE Flat washer (8), 5/8 Locknut (4)	
5	1	Complete Beater	20122
6	OP	Drive side stub shaft and disc	86220
		Beater bearing upgrade, Includes keys 1 to 5	20123

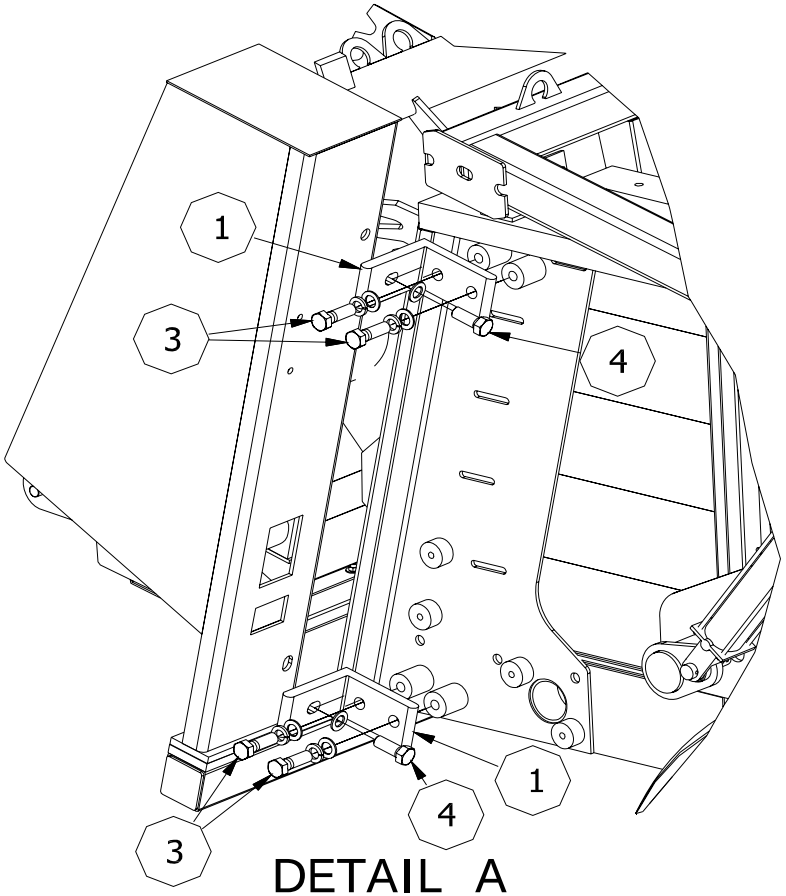


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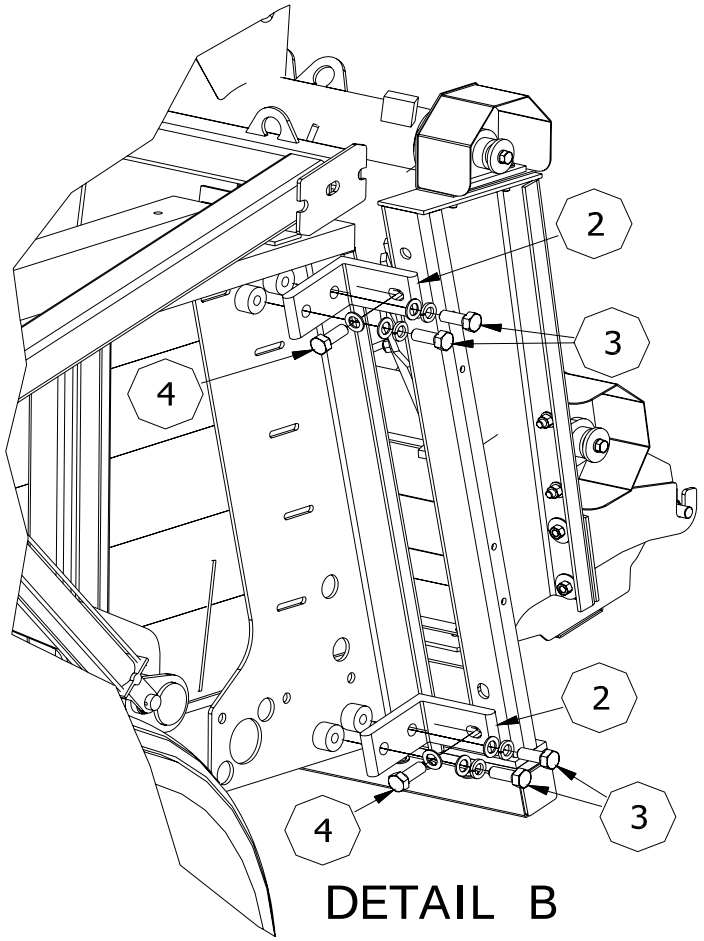
key	Qty	Description	Part Number
1	2	Beater frame mounting bracket, drive side	70416
2	2	Beater frame mounting bracket, idler side	70415
3	AR	Bolts	3/4 x 2 (8), SAE flat washer (8), lockwasher (8)
4	AR	Bolts	3/4 x 2 (4), SAE flat washer (8), locknut (4)







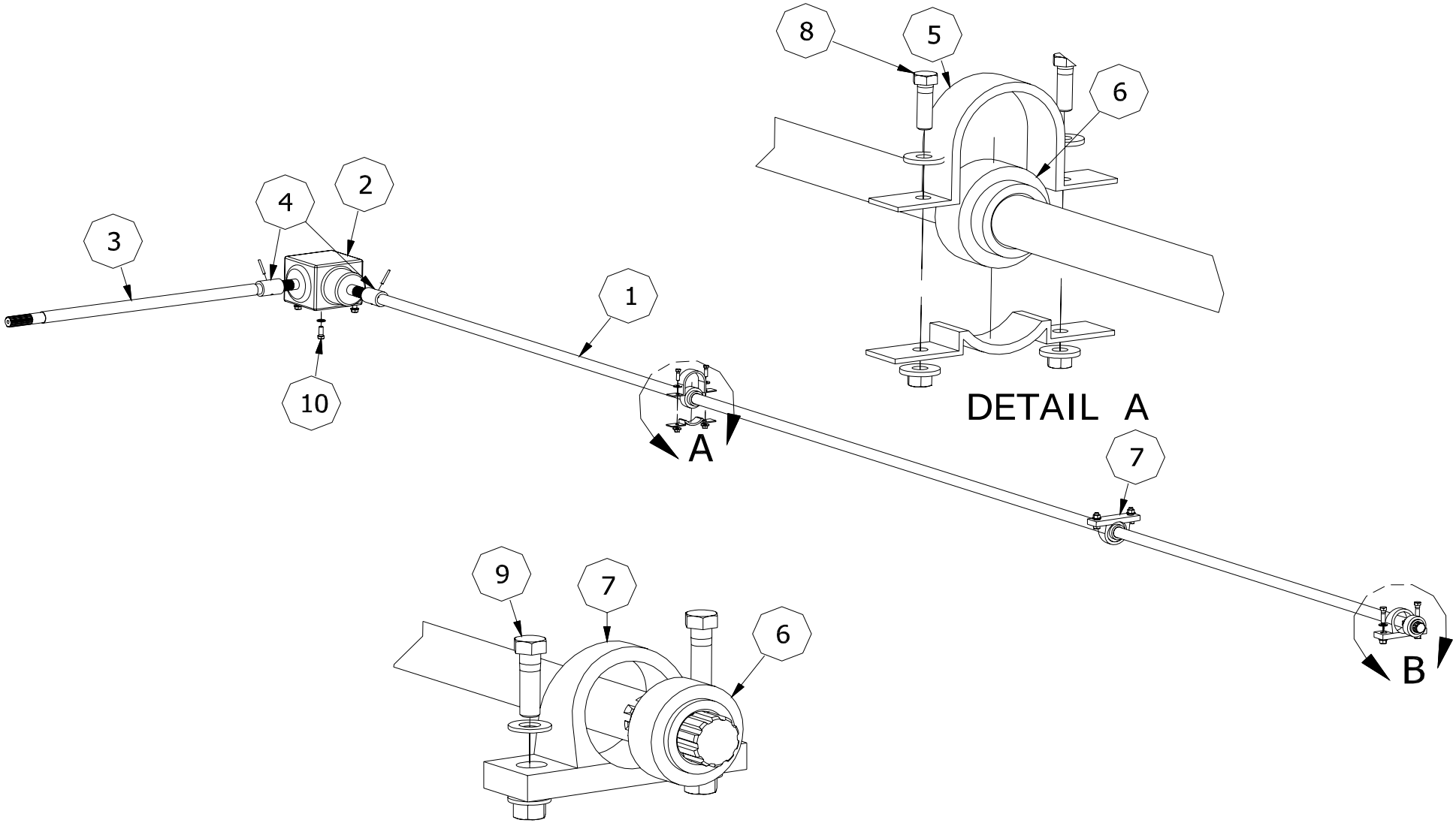
DETAIL A



DETAIL B

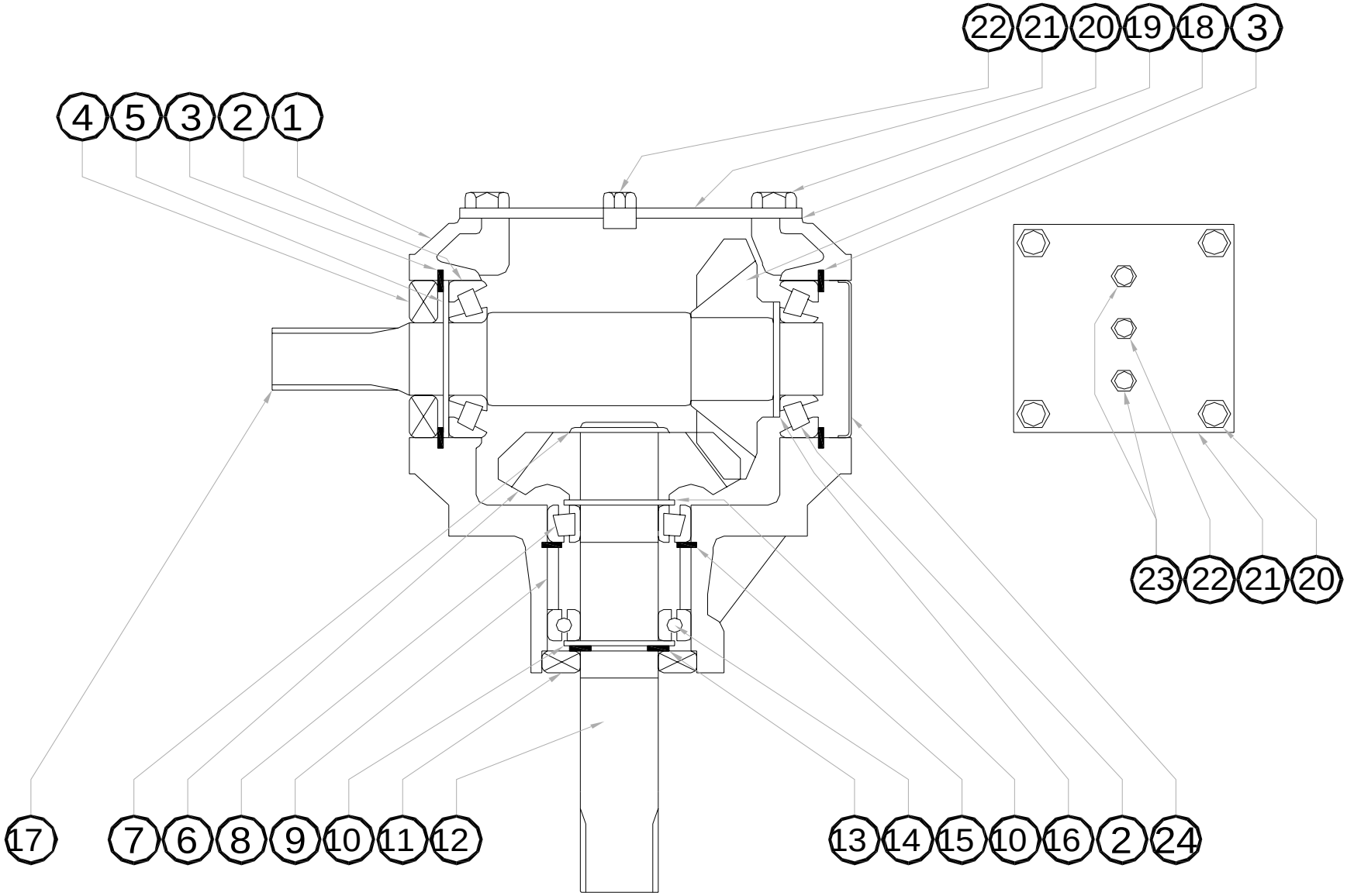
Input shaft, Gearbox, and Bearings	2.1
Gearbox Breakdown	2.3

key	Qty	Description		Part Number
1	1	Input Shaft		76050
2	1	Gearbox (COMER DISCONTINUED JULY, 2019) USE PART# 76020		76588
3	1	Cross-shaft		76083
4	2	Splined Coupler		76090
5	1	2 piece bearing housing, stamped steel		76360
6	3	Bearing Insert		76372
	1	2 Piece bearing assembly, stamped steel, Includes keys 5 & 6		76065
7	2	Pillow block bearing housing, ductile iron		76371
	2	Pillow block bearing assembly, Includes keys 6 & 7		76370
8	AR	Bolts	3/8 x 1 1/4 (6), Special Washers-79344 (12), Locknut (6)	
9	AR	Bolts	1/2 x 1 3/4 (4), SAE Flat Washers (8), Locknut (4)	
10	AR	Bolts	1/2 x 1 1/4 (4), Lockwashers (4)	


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DETAIL B

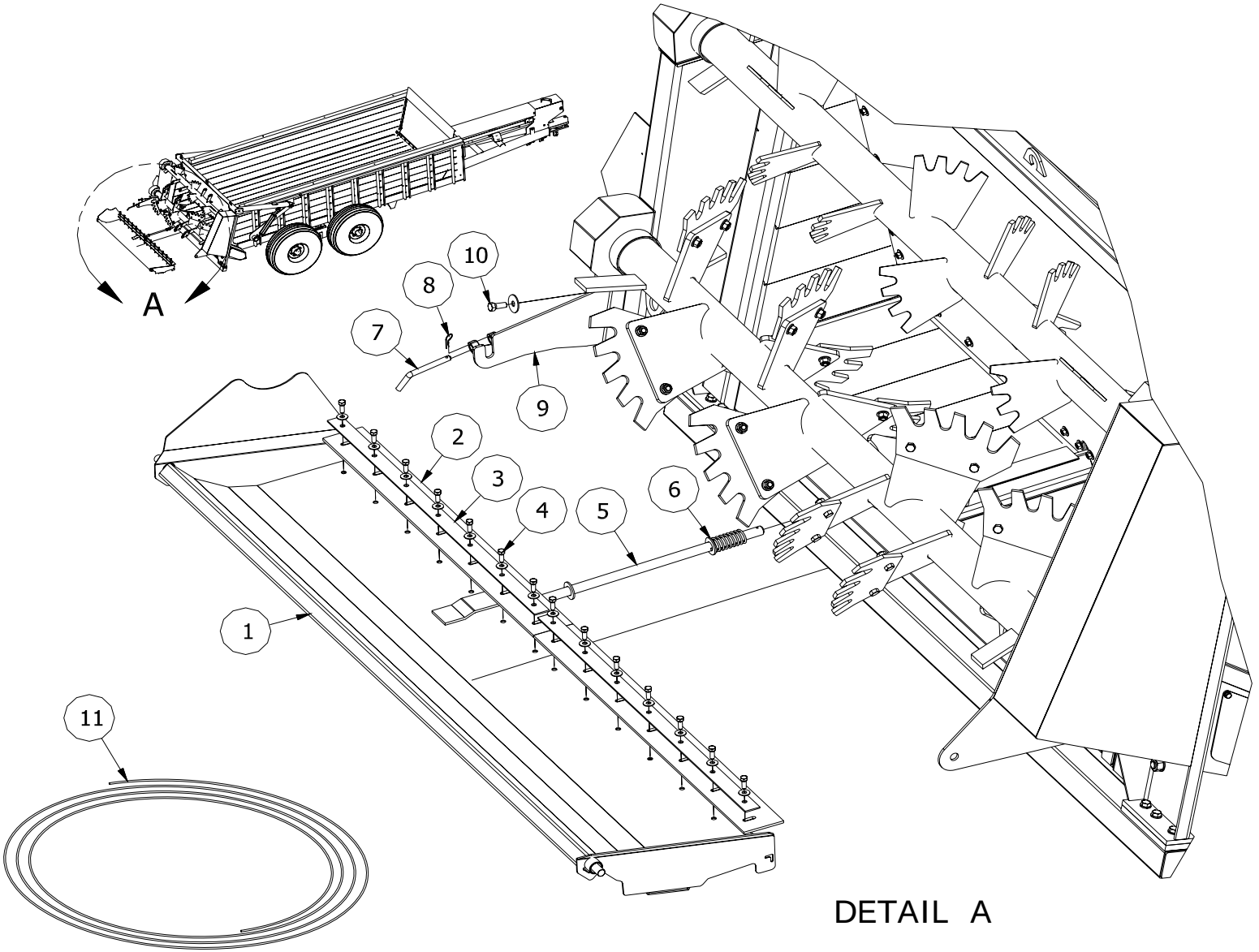
DISCONTINUED JULY, 2019 LIMITED PART AVAILABILITY

key	Qty	Description	Part Number
1	1	Housing	76588.01
2	2	Bearing, tapered roller, No. 30208	411126
3	2	Internal circlip	76588.03
4	1	Oil Seal, 40mm x 80mm	76588.04
5	1	Shim	76588.05
6	1	Gear, input	76588.06
7	1	External circlip	76588.07
8	1	Bearing, tapered roller, No. 30207	76588.08
9	2	Spacer	76588.09
10	2	Shim	76588.10
11	1	Seal, 35mm x 72mm	76588.11
12	1	Input shaft	76588.12
13	1	External circlip	76588.13
14	1	Bearing, ball, No. 6207	76588.14
15	1	Internal circlip	76588.15
16	1	Shim	76588.16
17	1	Output shaft	76588.17
18	1	Gear, output	76588.18
19	1	Gasket	76588.19
20	4	Cap screw 10 x 14	76588.20
21	1	Cover	76588.21
22	1	Breather	76588.22
23	2	3/8 NPT pipe plug	76588.23
24	1	Press-in cap, 80 mm	76588.24

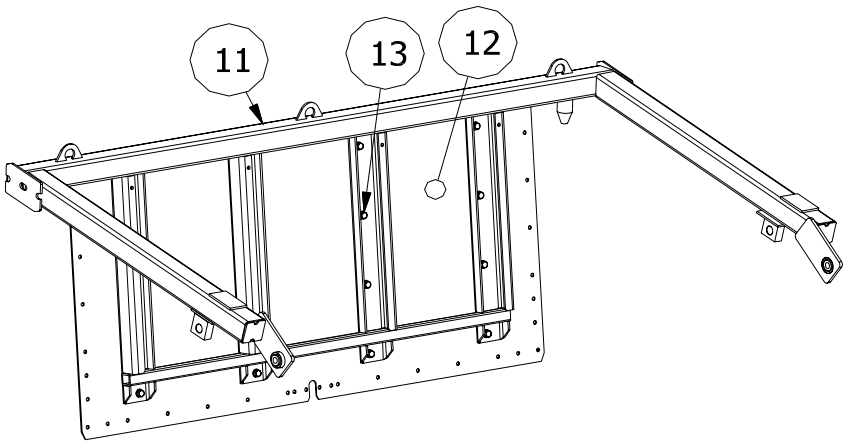

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Beater pan	3.1
Endgate Serial 4472-5240	3.3
Endgate Serial 5319-On	3.5

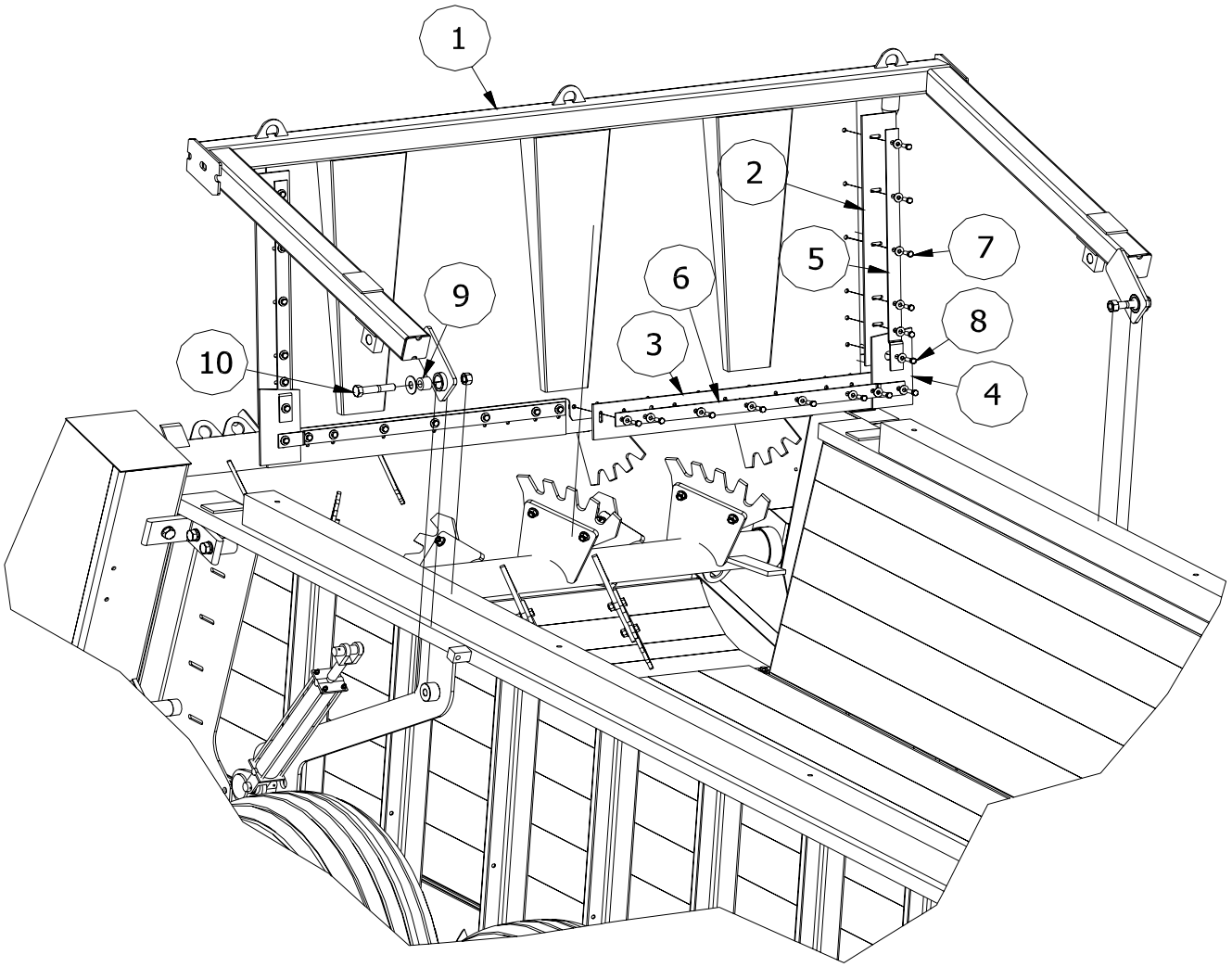
key	Qty	Description		Part Number
1	1	Beater pan weldment		20088
2	2	Rubber seal for beater pan		78027
3	2	Galvanized strip for beater pan seal		1399-1030
4	AR	Bolts	3/8 x 1 (14), USS flat washer (28), locknut (14)	
5	1	Beater pan latch pin		74532
6	1	Spring for beater pan latch pin		74570
7	1	Lock pin		74502
8	1	Hair pin		5/32"
9	1	Beater pan mounting bracket		70415
10	AR	Bolts	1/2 x 1 1/4 (2), USS flat washer (4), locknut (2)	
11	1	Beater pan trip cable		N/A
	2	Cable clamp 1/8"		79830
		Beater pan seal kit, Includes keys 2, 3, 4		20097


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DETAIL A

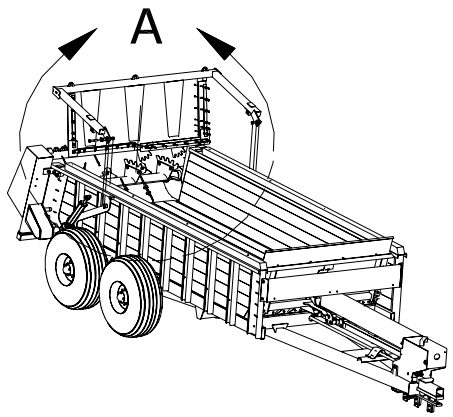
key	Qty	Description	Part Number
1	1	Endgate Weldment	Replace with, 20162, 20145R and 20145L from page 3.5
2	2	Rubber Strip, Endgate Side	78220
3	2	Rubber Strip, Endgate Bottom	78200
4	2	Rubber for Corners of Endgate	78250
5	12	SPECIAL WASHER, Endgate Side	1399-1030
6	18	SPECIAL WASHER, Endgate Bottom	1399-1030
7	AR	Bolts, Endgate Seal Kit	3/8 x 1 (24), 3/8 SAE flat washer (48), Locknut (24)
8	AR	Bolts, Endgate Seal Kit	3/8 x 1 1/4 (4), 3/8 SAE flat washer (8), Locknut (2)
9	2	Endgate Pivot Bushing	74240
10	AR	Bolts, Endgate Pivot	3/4 x 4 (2), USS flat washer (2), Locknut (2)
		Endgate seal kit, Includes keys 2-8	84080
11		Welded arm endgate frame	Replace with, 20162, 20145R and 20145L from page 3.5
12		Endgate panel, bolt-on	74082
13		Bolts, Endgat Panel	1/2 x 1 1/4 (16), SAE washer (32), Locknut (16)



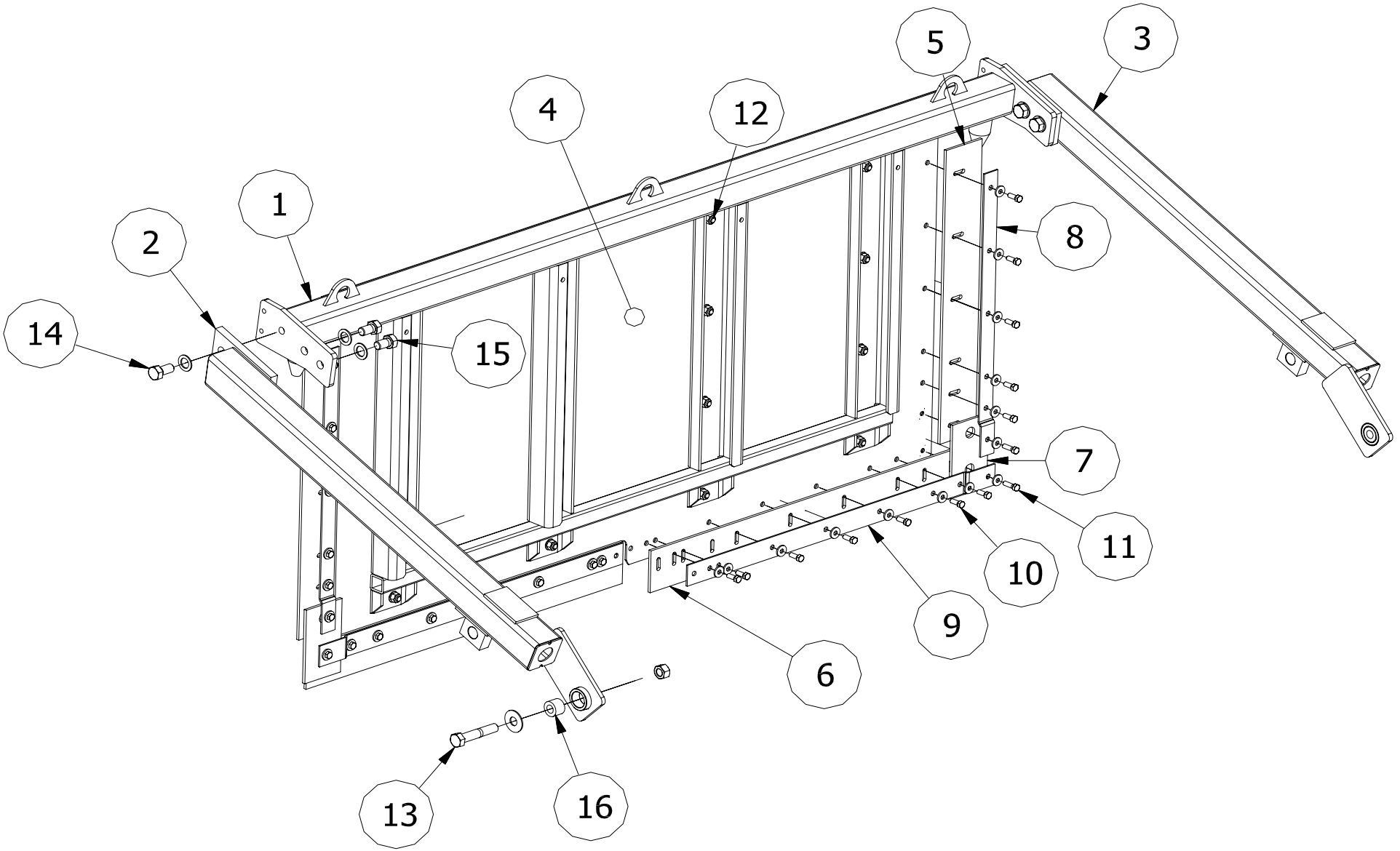
Late 227's in this serial range were built using a welded frame with a bolt-on replaceable panel as shown left.
All endgates are replaced with the 3pc bolted style on page 3.5



DETAIL A



key	Qty	Description		Part Number
1	1	Endgate frame		20162
2	1	Endgate Arm, Right		20145R
3	1	Endgate Arm, Left		20145L
4	2	Endgate panel		74082
5	2	Rubber Strip, Endgate Side		78220
6	2	Rubber Strip, Endgate Bottom		78200
7	2	Rubber for Corners of Endgate		78250
8	6	SPECIAL WASHER, Endgate Side		79027
9	18	SPECIAL WASHER, Endgate Bottom		79027
10	AR	Bolts, Endgate Seal Kit	3/8 x 1 (24), 3/8 SAE flat washer (48), Locknut (24)	
11	AR	Bolts, Endgate Seal Kit	3/8 x 1 1/4 (4), 3/8 SAE flat washer (8), Locknut (4)	
		Endgate seal kit, Includes keys 5-11		84080
12	AR	Bolts, Endgate panel	1/2 x 1 1/4 (16), 1/2 SAE flat washer (32), 1/2 lockut (16)	
13	AR	Bolts, Endgate pivot	3/4 x 4 (2), USS flat washer (2), Locknut (2)	
14	AR	Bolts, Endgate lift arm	3/4 x 1 1/2 (2), Grade 8 washer (2)	
15	AR	Bolts, Endgate lift arm	3/4 x 1 1/4 (4), Grade 8 washer (4)	
16	2	Endgate Pivot Bushing		74240

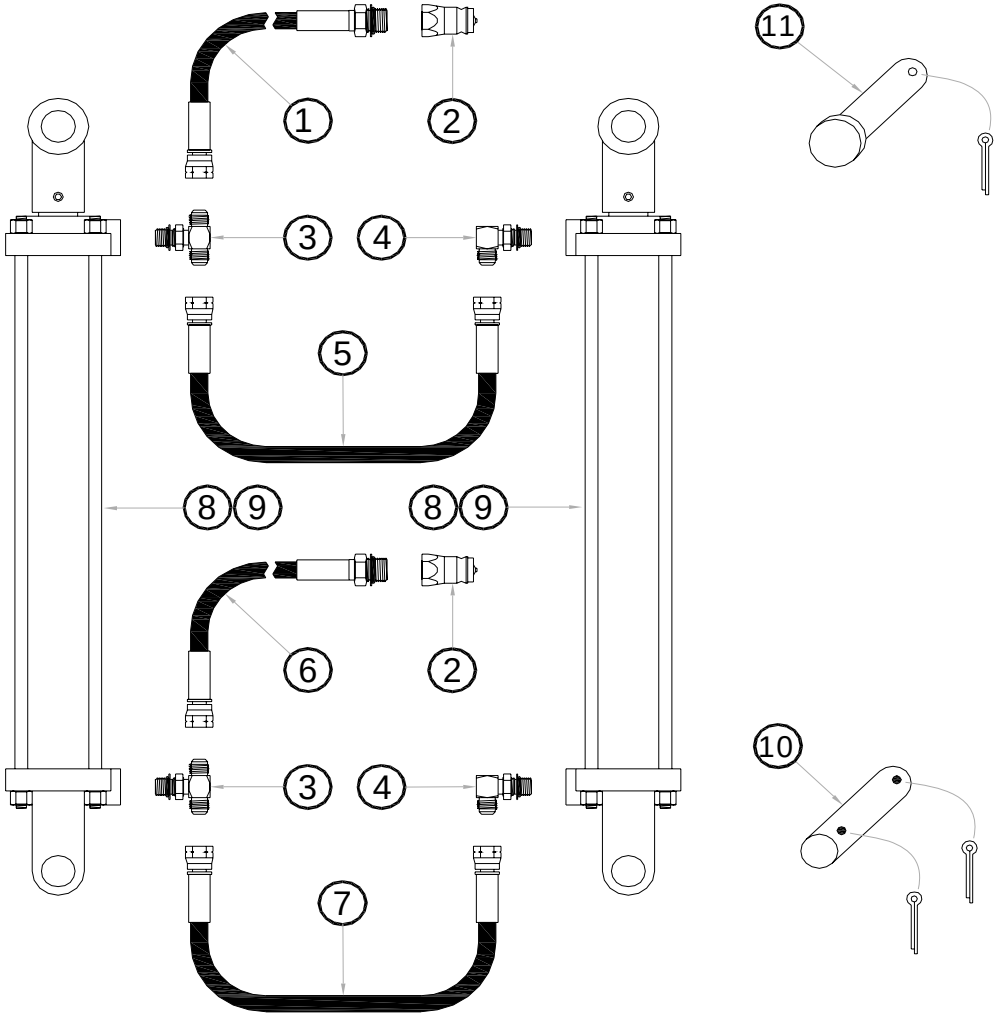

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Endgate hydraulics, Standard Non-sequence Valve Only	4.1
Special Endgate Cylinder Information, SN 5319-5349	4.3

For machines equipped with optional sequence valves see section 5 - Push-off Hydraulics

key	Qty	Description	Part Number
1	1	Hose, connecting upper port of cylinders to tractor	77242
2	2	ISO Male tip (poppet style)	77500
3	2	T-Fitting	77530
4	2	L-Fitting	77520
5	1	Hose, connecting upper port of cylinders	77173
6	1	Hose, connecting lower port of cylinders to tractor	77252
7	1	Hose, connecting lower port of cylinders	77172
8	2	Endgate cylinder — Serial 4472-5240	77154
		Endgate cylinder — Serial 5319-On[1]	77154
9	2	Seal Kit	N/A
10	2	Endgate cylinder pin with two cotter pins	77640
11	2	Headed endgate cylinder pin with one cotter pin	77070

(1) SN 5319 was equipped from the factory with special cylinders. SN 5348 and 5349 may also have these cylinders. See page 4.3 for info.


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Key	Qty	Description	Part Number
1	-	T-Fitting, 3/8 NPT male branch x #6 JIC male run	77168
2	-	L-Fitting, 3/8 NPT male x # 6 JIC	77169
3	-	T-Fitting, #8 SAE male branch x #6 JIC male run	77216
4	-	L-Fitting, #8 SAE male x #6 JIC male	77680
5	-	Straight Fitting, #8 SAE male x #6 SAE female	77185
6	-	T-Fitting, #6 SAE male branch x #6 JIC male run	77530
7	-	L-Fitting, #6 SAE male x #6 JIC male	77520

Supply problems forced the use of non-standard cylinders. This page and the following show what those cylinder arrangements should look like. Hoses and valves remain the same as shown on page 4.1 for standard valves, or 5.5, and 5.7 for sequencing valves. changes apply only to the endgate cylinders and fittings.

2 1/2 x 16 Cylinders with 3/8 NPT Ports

Replace with 77154 and new fittings from page 4.1
If replacing fittings be sure to seal with loctite 592 pipe sealant or equivalent high pressure (3000psi min.) pipe sealant

2 1/2 x 16 Cylinders with #8 SAE Ports

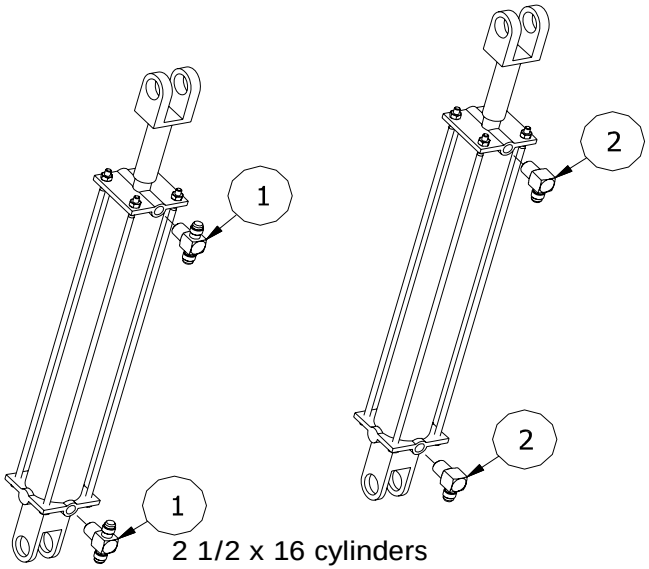
Replace with 77154 and new fittings from page 4.1

2 1/2 x 16 Cylinders with #8 SAE Ports

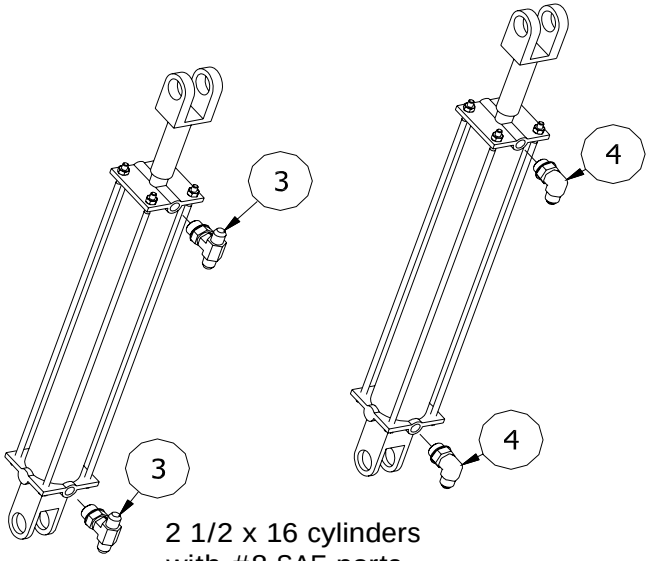
Replace with 77154, Discard fitting key 7 and re-use fittings 5 and 6.

2 1/2 x 16 Cylinders with #6 SAE Ports

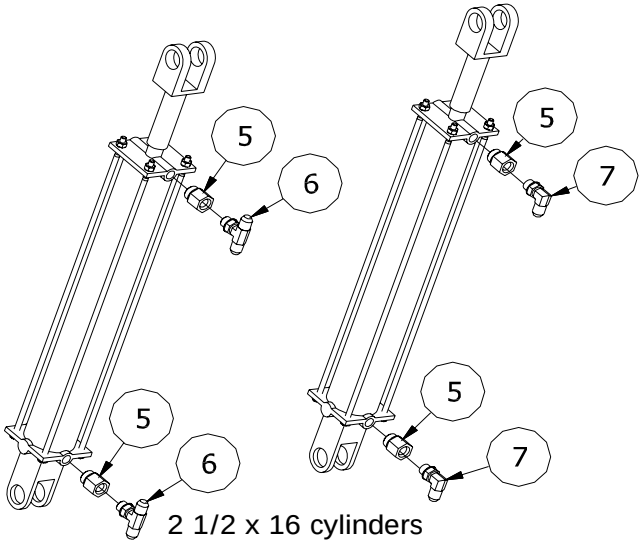
This is the standard arrangement. Replace with 77154 as showin on page 4.1



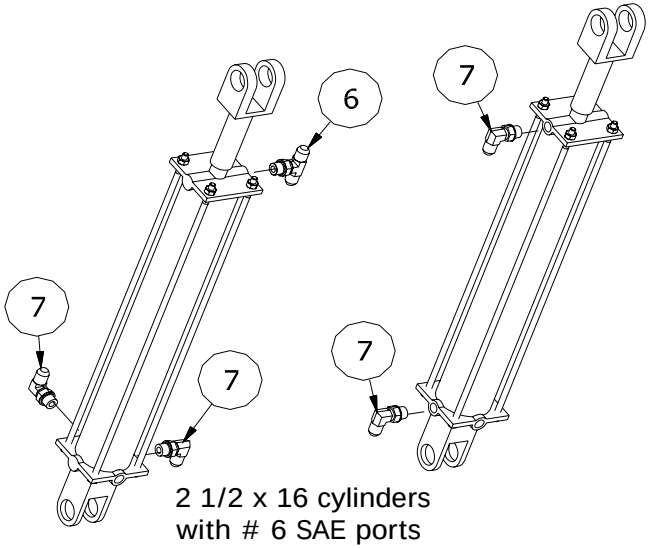
2 1/2 x 16 cylinders
with 3/8 NPT ports



2 1/2 x 16 cylinders
with #8 SAE ports



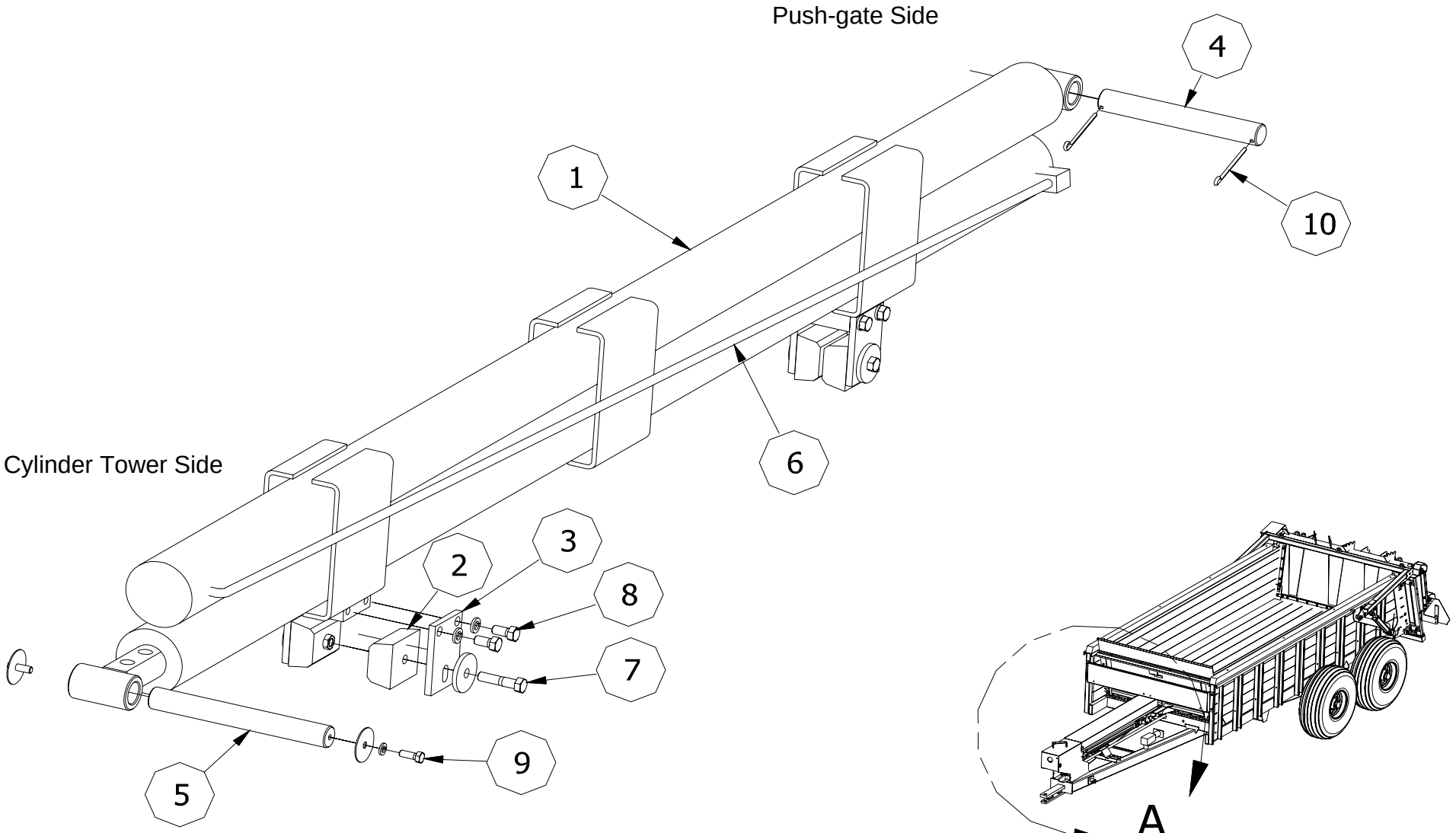
2 1/2 x 16 cylinders
with #8 SAE ports



2 1/2 x 16 cylinders
with # 6 SAE ports
(Standard)

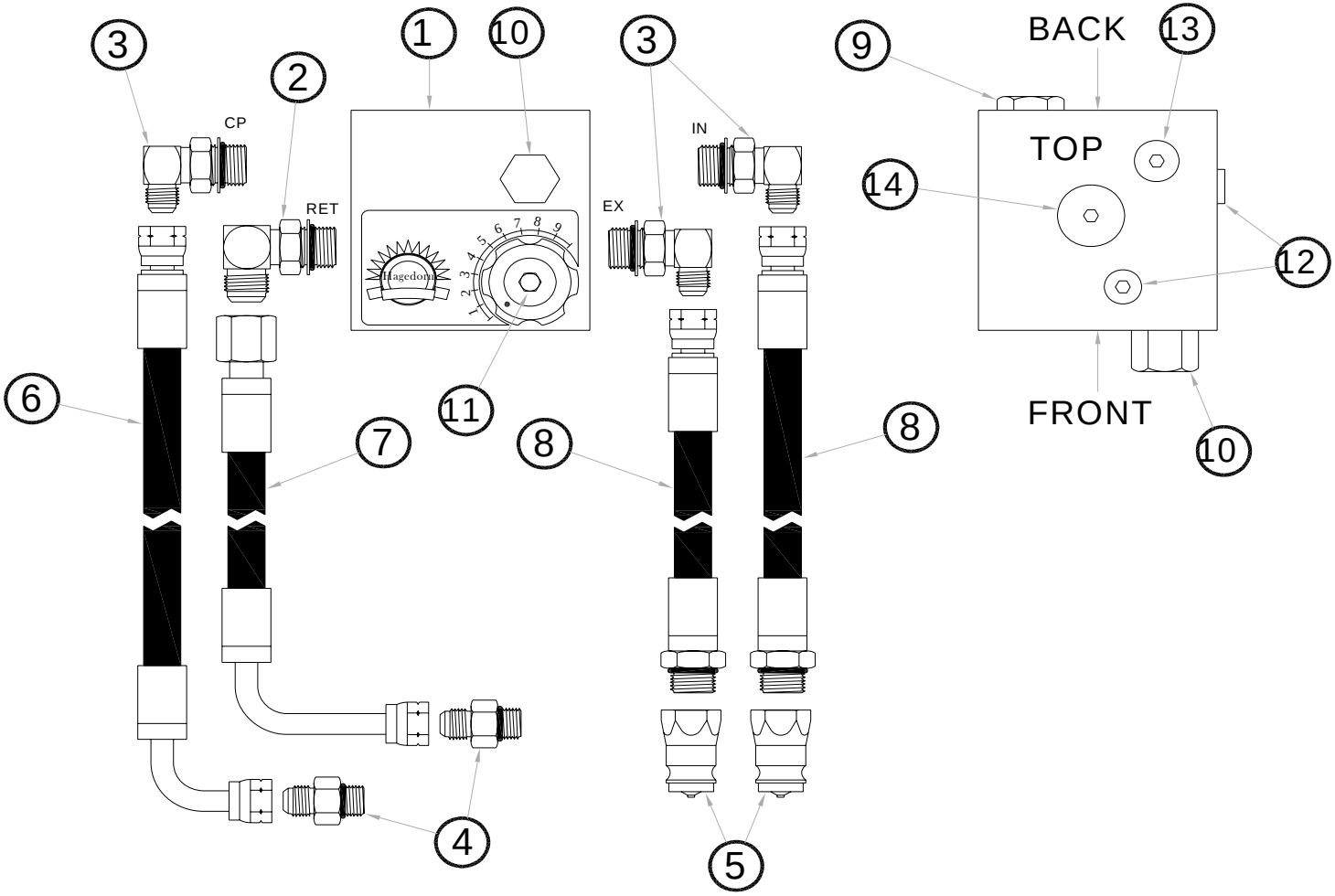
Push-off cylinder assembly	5.1
Hydraulic hoses and control valve	5.3
Opt. Sequencing Valve and Hoses, SN 5000-5386	5.5
Opt. Sequencing Valve and Hoses, SN 5387-On	5.7
Push-off cylinder breakdown	5.9

key	Qty	Description	Part Number
1	1	Push-off Cylinder (including keys 2 and 3)	20096
2	4	Cylinder Slide	75072
3	4	Standoff for cylinder slide	77853
4	1	Cylinder Pin at Push-Gate	77701
5	1	Cylinder Pin at Tower	77068
6	1	External conductor tube	77018
7	AR	Bolts	1/2 x 2 (4), Special Washer - 79010 (4), Locknut (4)
8	AR	Bolts	1/2 x 1 1/4 (8), Lockwasher (8)
9	AR	Bolts	3/8 x 1 (2), Lockwasher (2), Special Washer -1399-1030
10	2	Cotter pins	3/16 x 2



DETAIL A

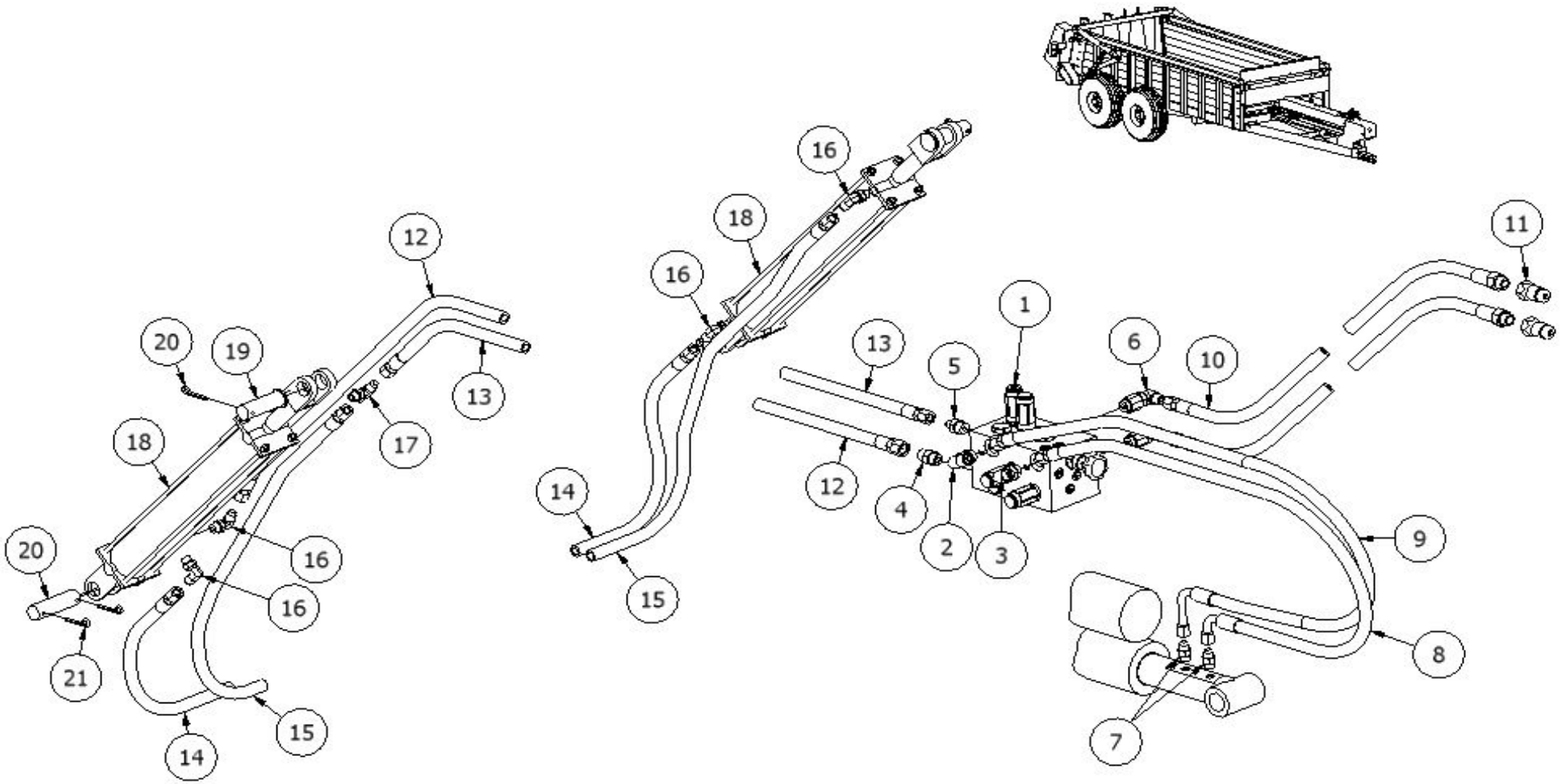
key	Qty	Description	Part Number
1	1	Flow Control Valve	77003
2	1	L-Fitting	471466
3	3	L-Fitting	77680
4	2	Male Connector	77400
5	2	ISO Male Tip (poppet style)	471945
6	1	Hose, CP to Cylinder	77232
7	1	Hose, RET to Cylinder	77222
8	2	Hose, IN/EX to Tractor	77212
9	1	Check Valve for Flow Control Valve	77058
10	1	Differential Sensing Valve for Flow Control Valve	77059
11	1	Metering Cartridge for Flow Control Valve	77060
12	2	#4 ORB Hex Socket Plug	77061
13	1	#6 ORB Hex Socket Plug	77062
14	1	#8 ORB Hex Socket Plug	77063


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key	Qty	Description		Part Number
1	1	Sequencing Flow Control[1]		20142
2	1	L-Fitting		471466
3	1	L-Fitting		77680
4	1	Straight Fitting		471313
5	1	Straight Fitting		77108
6	2	Flow restrictor valve assembly		Call
7	2	Straight Fitting		77400
8	1	Hose, CP to Cylinder		77232
9	1	Hose, RET to Cylinder		77222
10	2	Hose, to Tractor		77212
11	2	ISO Male Tip (poppet style)		471945
12	1	Hose, Raise to endgate cylinder		77148
13	1	Hose, Lower to endgate cylinder		77147
14	1	Hose, Cross-over, Cap		77172
15	1	Hose, Cross-over, Rod		77173
16	4	L-Fitting		471450
17	1	T-Fitting		77530
18	2	Endgate Cylinder	SN 4472-5240	77154
			SN 5319-On[2]	77154
19	2	Cylinder Pin, Headed		77070
20	2	Cylinder Pin		77640
21	6	Cotter Pin		3/16 x 1 1/2

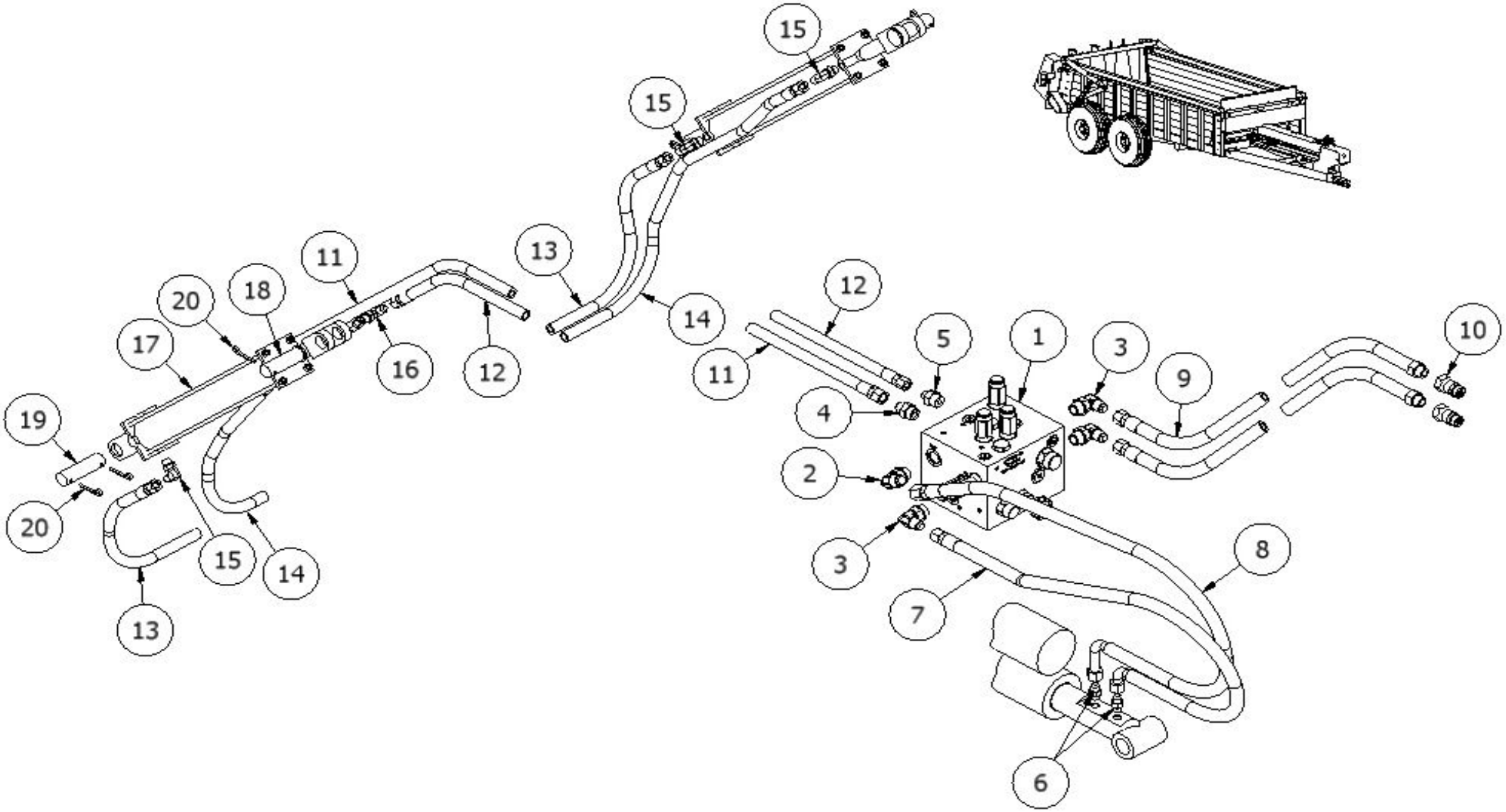
(1)This section applies to original equipment sequence valves only. For retrofit use serial range 5387-On on page 5.7 & 5.8

(2) SN 5319 was equipped from the factory with special cylinders. SN 5348 and 5349 may also have these cylinders. See page 4.3 in Section 4, Endgate Hydraulics for info.

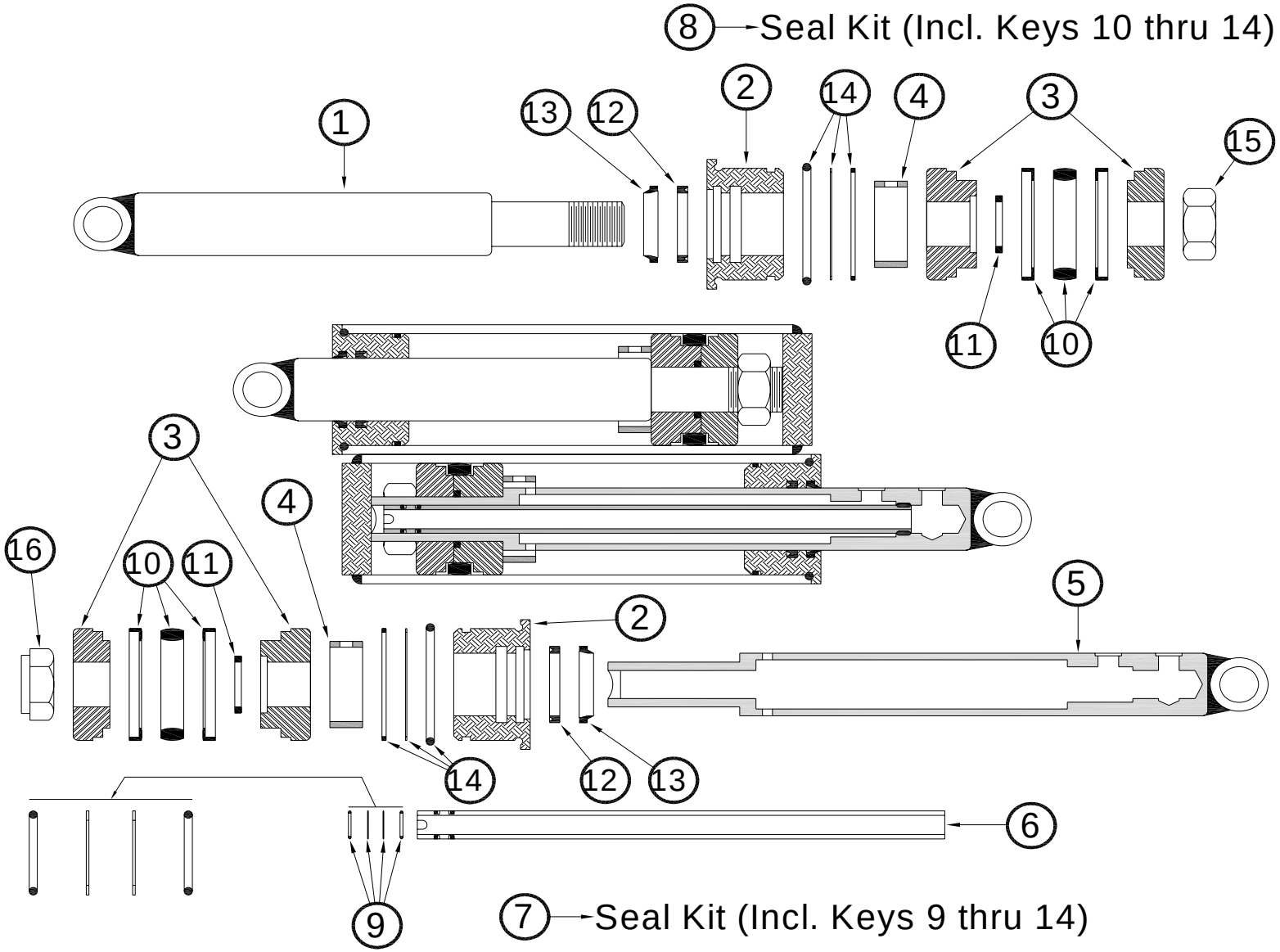

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key	Qty	Description	Part Number
1	1	Sequencing Flow Control[1]	20186
2	1	L-Fitting	471958
3	3	L-Fitting	77196
4	1	Straight Fitting	77192
5	1	Straight Fitting	471307
6	2	Straight Fitting	77400
7	1	Hose, CP to Cylinder	77232
8	1	Hose, RET to Cylinder	77222
9	2	Hose, to tractor	77212
10	2	ISO Male Tip (poppet style)	471945
11	1	Hose, Raise to cap end of endgate cylinder	77148
12	1	Hose, Lower to rod end of endgate cylinder	77147
13		Hose, Cross-over, Cap	77172
14		Hose, Cross-over, Rod	77173
15		L-Fitting	471450
16		T-Fitting	77530
17		Endgate Cylinder	77154
18		Headed endgate cylinder pin with one cotter pin	77070
19		Endgate cylinder pin with two cotter pins	77640
20		Cotter Pin	3/16 x 1 1/2

[1] Sequencing valves are not user servicable. Model 227 is not compatible with any other "current" sequence valve. If replacing or adding a sequence valve to a 227 do not use one from another machine.


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key	Qty	Description	Part Number
1		Solid Rod	DISCONTINUED
2		Gland	77021
3		Piston	77028
4		Spacer	77031
5		Hollow Rod	DISCONTINUED
6		Internal Conductor Tube	DISCONTINUED
7		Seal Kit, Hollow Rod	77024
8		Seal Kit, Solid Rod - No Longer Available	Use 77024
9		O-Rings & Backups for internal conduc	- Included in key 7. Not available seperately
10		Piston Seals	
11		O-Ring	
12		Rod Seal	
13		Rod Wiper	
14		O-Ring & Backup for Gland Seal	
15		Nut for solid rod	77034
16		Nut for hollow rod	77035

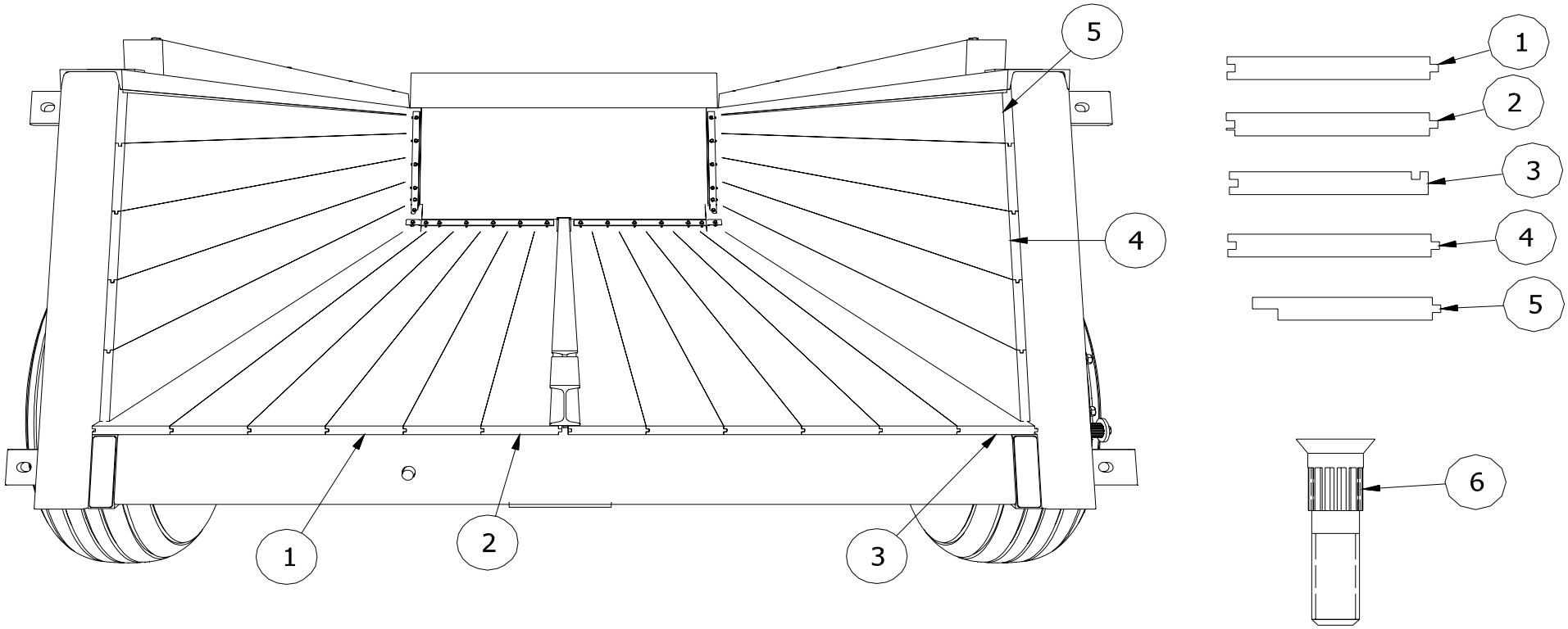

8 Seal Kit (Incl. Keys 10 thru 14)
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7 Seal Kit (Incl. Keys 9 thru 14)

Plastic boards 6.1

key	Qty	Description	Part Number
1	8	Floor Board	1315-1014
2	2	Centre Floor Board	1315-1014
3	2	Outside Floor Board	1315-1014
4	8	Side Board	1315-1014
5	2	Top Side Board	1315-1014
6	258	Special Bolt for Plastic boards	79005
	258	Special washer for plastic boards	1399-1029
	258	Locknut	3/8" Plated

ALL BOARDS COME AT STOCK LENGTHS IN SELECTED PROFILE AND REQUIRE BEING CUT TO LENGTH

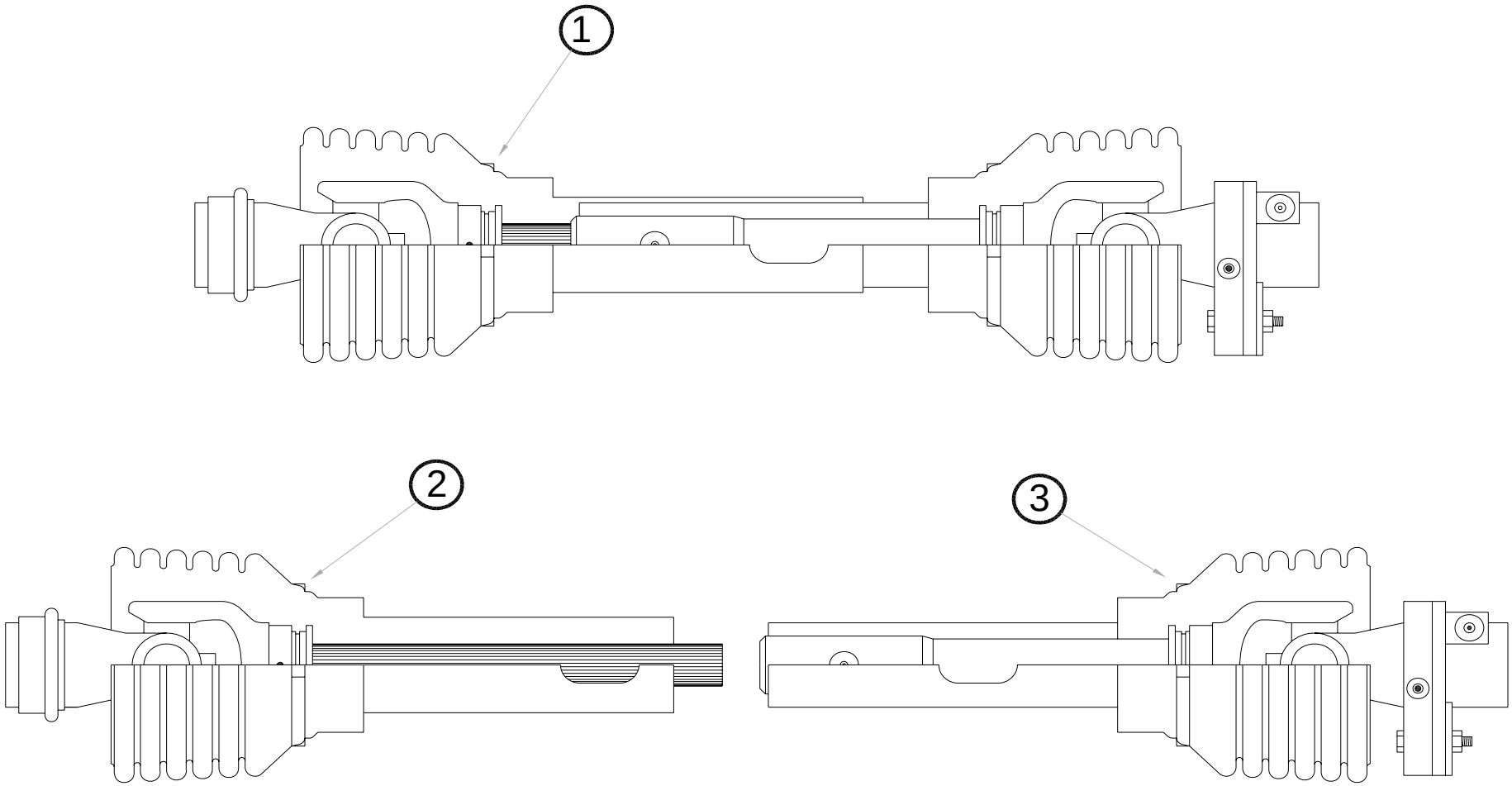
Side boards may also be used as floor boards.
Floor boards may not be used as side boards.


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PTO shaft assemblies	7.1
PTO shaft breakdown	7.3

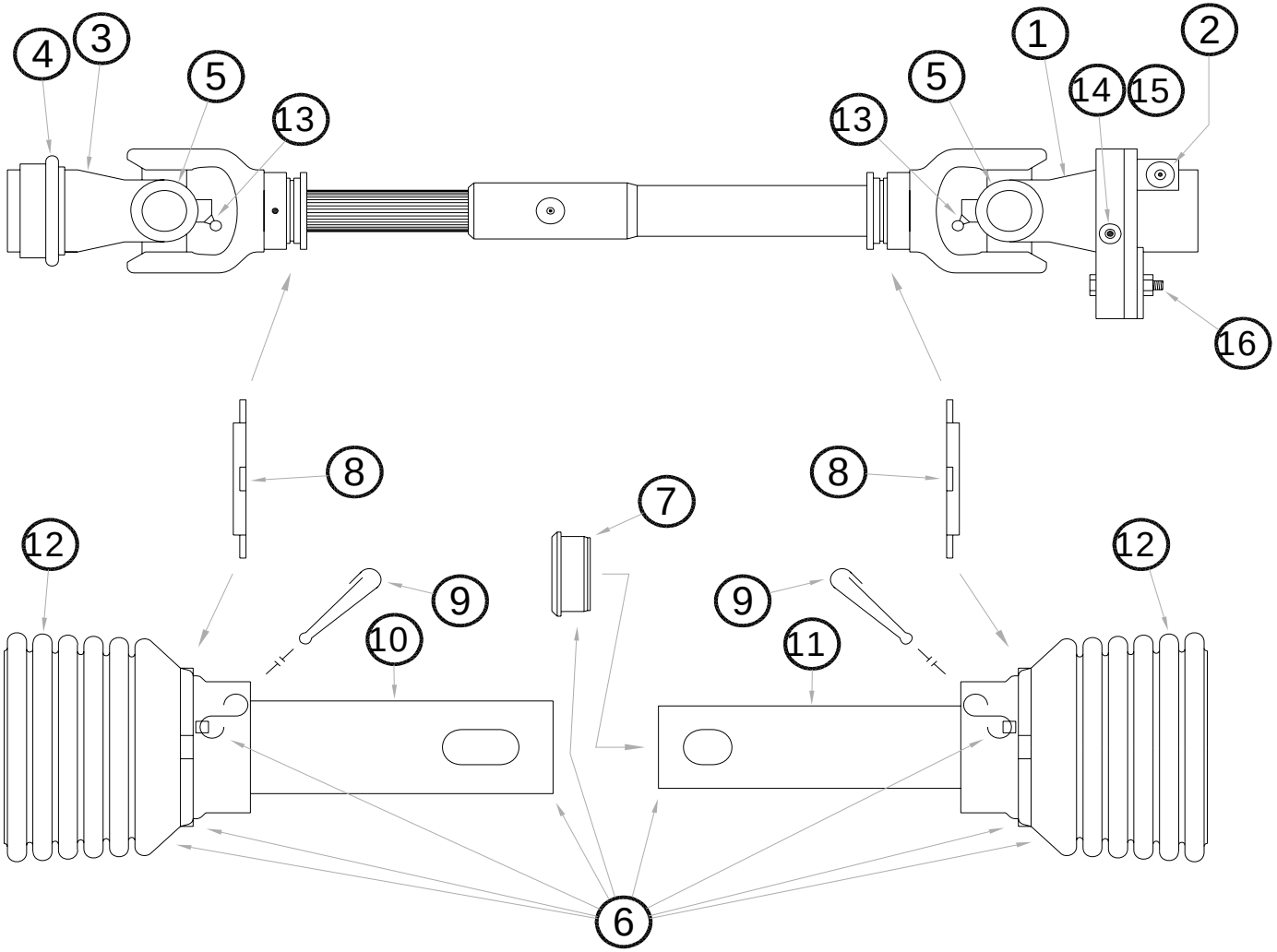
key	Qty	Description	540 RPM	1000 RPM
			1 3/8-6	1 3/8-21
1	1	Complete Shaft	76440	76450
2	1	Tractor half shaft	76447	76452
3	1	Implement half shaft	76448	76114
		Implement half shaft kit[1]	20189	

(1) Includes parts required to assemble either 76448 or 76114 (proper shear bolts).
This part will be shipped in the case either 76448 or 76114 are ordered


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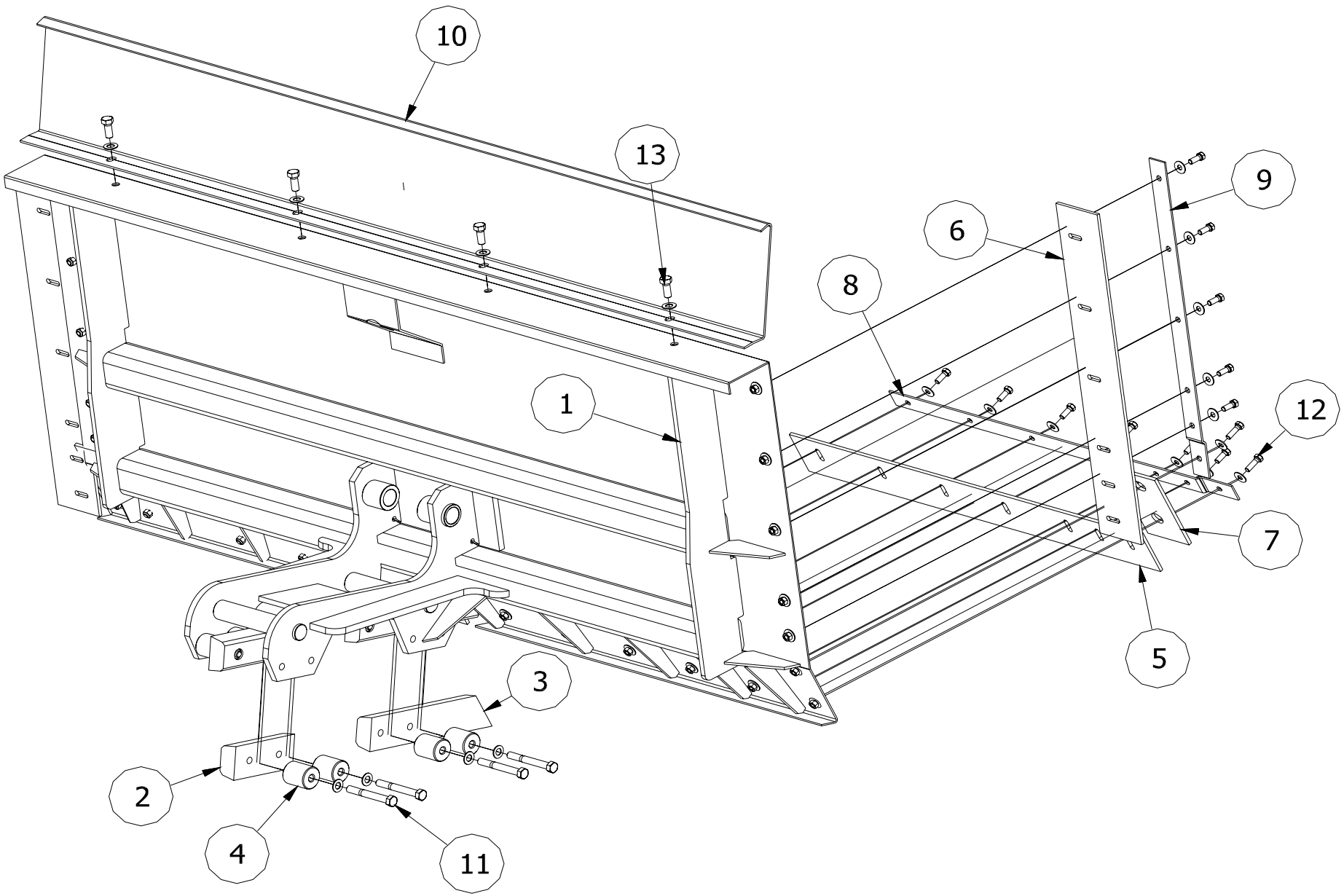
key	Qty	Description		540 RPM	1000RPM
				1 3/8-6	1 3/8-21
1	1	Implement End Yoke		76440.3	76115
		Implement End Yoke Kit[1]		N/A	
2	AR	Repair Kit, implement End Yoke		76440.4	
3	1	Tractor End Yoke		76440.1	76450.1
4	AR	Repair kit, slide collar, tractor end yoke		76440.2	
5	AR	Cross kit for all Waltershied Shafts		76440.5	
6	AR	Replacement shield with bearings and safety chains		76440.6	
7	AR	Support bearing for inner shield		76440.04	
8	AR	Shield bearing		76440.05	
9	AR	Safety Chain, for all PTO shafts		76440.06	
10	AR	Outer Shield Tube		76440.02	
11	AR	Inner Shield Tube		76440.03	
12	AR	Shield Cone		76440.01	
13	AR	Grease Zerk, for cross and bearing kit		76440.11	
14	AR	Grease Zerk, for shear bolt yoke		76440.9	
15	AR	Bearing ball, for shear bolt yoke		76440.07	
16	AR	Shear bolt	5/16 x 2 1/4	Grade 5	Grade 2

(1) Includes parts required to make76440.3 or 76115 (proper shear bolts). Also this part number will be shipped in the case either 76440.3 or 76115 are ordered.

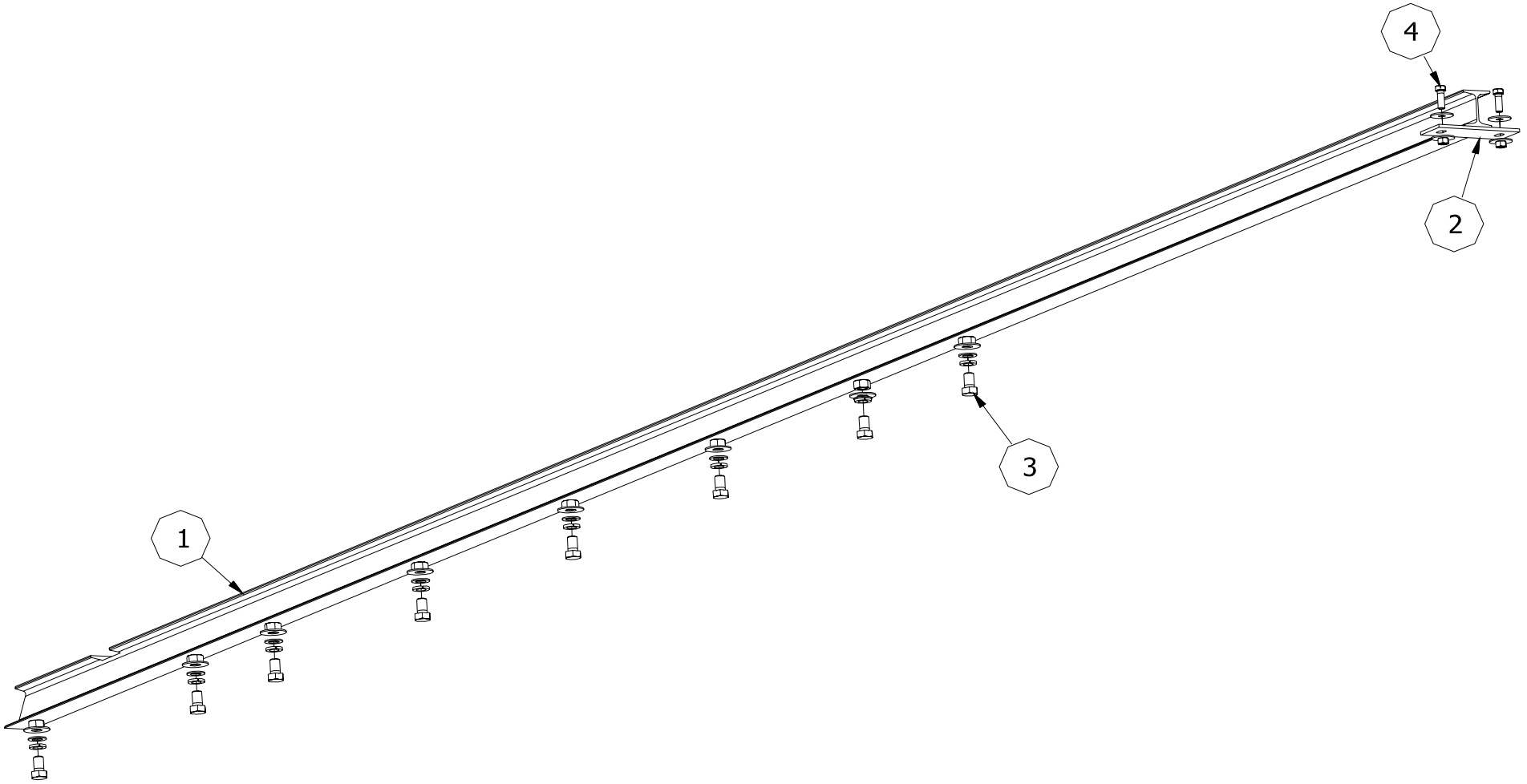

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Push-gate assembly	8.1
Slide rail	8.3

key	Qty	Description		Part Number
1	1	Push-gate weldment		20029
2	2	Sled bearing, front		75071
3	1	Sled bearing, rear left		75069
	1	Sled bearing, rear right (Not Shown)		75099
4	4	Sled bearing spacer		75142 X2
5	2	Rubber seal		78210
6	2	Rubber seal		78220
7	2	Rubber seal		78250
8	14	SPECIAL WASHER		1399-1030
9	12	SPECIAL WASHER		1399-1030
10	1	Push-gate extension		75311
11	AR	Bolts	1/2 x 4 (8), SAE flat washer (8), locknut (8)	
12	AR	Bolts	3/8 x 1 (22), 3/8 x 1 1/4 (4), SAE flat washer (52), locknut (26)	
13	AR	Bolts	1/2 x 1 (4), USS flat washer (8), locknut (4)	
		Complete Push-gate Assembly (Keys 1 to 13)		20095
		Sled Bearing Kit, 277, Includes keys 2, 3 and 11		20140
		Push-Gate Seal Kit, Includes keys 5 to 9, and 12		85150

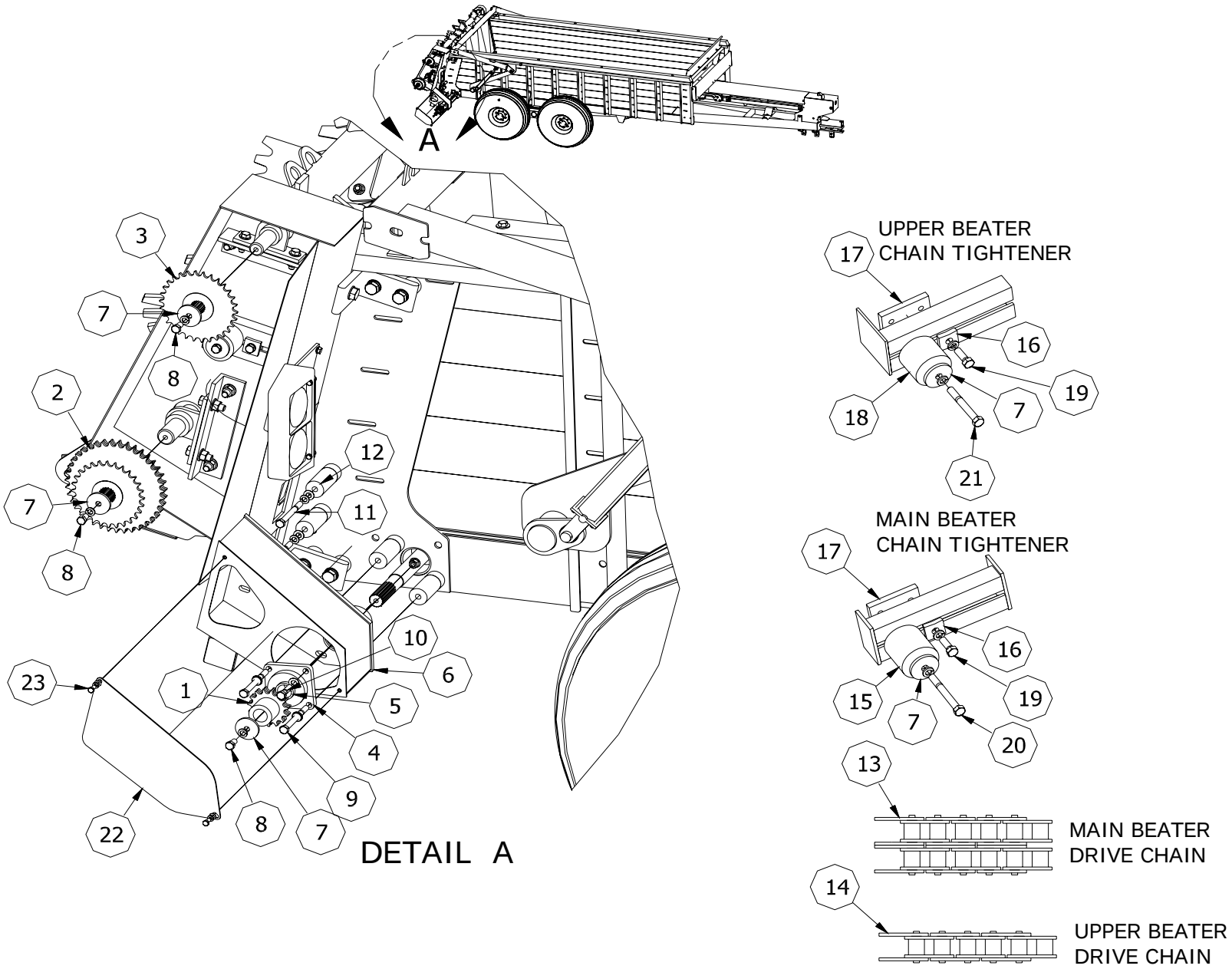

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key	Qty	Description		Part Number
1	1	Beam for slide rail		70561
2	1	Mounting plate for slide rail		70590
3	AR	Bolts	3/4 x 1 1/4 (8), SAE Washer (8), Lockwasher (8), USS Washer (8)	
4	AR	Bolts	1/2 x 1 1/2 (2), USS Washer (4), Locknut (2)	

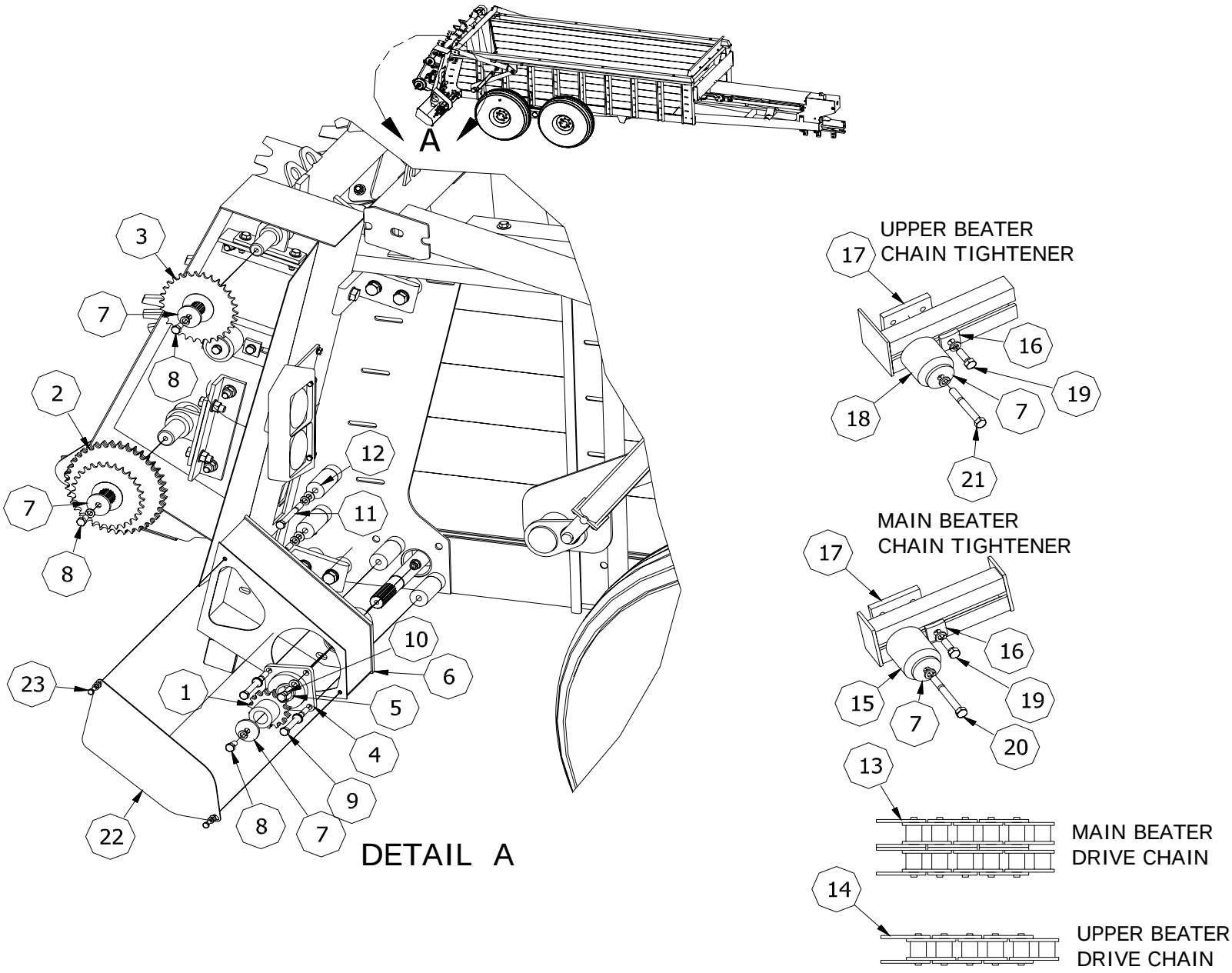

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Sprockets, Chains and Cross-shaft Bearing SN 4472-5066	9.1
Sprockets, Chains and Cross-shaft Bearing SN 5129-On	9.3

key	Qty	Description	Part Number	
			540 PTO	1000 PTO
1	1	Cross-shaft sprocket	76610	76640
2	1	Main beater sprocket	76600	76630
3	1	Upper beater sprocket	76620	
4	1	4 bolt flange bearing housing, Cross-shaft	76086	
5	1	Bearing insert	76372	
	1	Bearing Assembly, Keys 4 & 5	76079	
6	1	Cross-shaft housing	20092	
7	5	Special Heavy washer	79029	
8	AR	Bolts 1/2 x 1 (3), lockwasher (3)		
9	AR	Bolts 1/2 x 5 1/2 (2), SAE flat washer (2), lockwasher (2)		
10	AR	Bolts 1/2 x 2 (2), SAE flat washer (4), locknut (2)		
11	AR	Bolts 1/2 x 5 (3), SAE flat washer (3), lockwasher (3)		
12	4	Spacer	70504	
13	1	Main beater drive chain, double 60 roller chain 60-2 x 92 (540) 60-2 x 96 (1000)	76303	76304
14	1	Upper beater drive chain, single 60 roller chain, 60-1 x 92	76087	
15	1	Main beater chain tightener block	76350	
16	2	Clamp for chain tightener	79028	
17	2	Threaded block for chain tightener	76330	
18	1	Upper beater chain tightener block	76340	
19	AR	Bolts 1/2 x 1 1/2 (2), lockwasher (2)		
20	AR	Bolts 1/2 x 4 1/2 (1), lockwasher (1)		
21	AR	Bolts 1/2 x 4 (1), lockwasher (1)		
22	1	Door for cross-shaft housing	70515	
23	AR	Bolts 5/16 x 3/4 (2), SAE flatwasher (2), lockwasher (2)		
		Chain Tightener Assembly, Main Beater, Includes keys 7, 15, 16, 17, 19, 20	86180	
		Chain Tightener Assembly, Upper Beater, Includes keys 7, 16, 17, 18, 19, 20	86190	

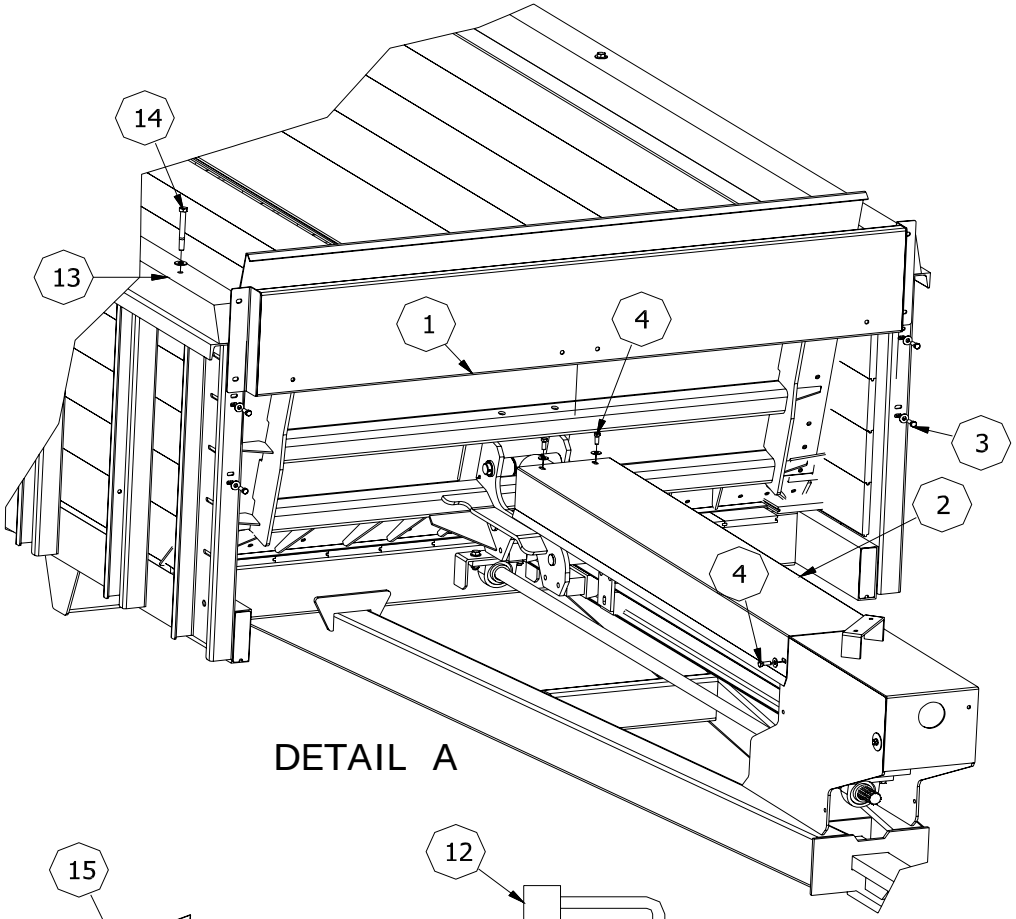

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DETAIL A
UPPER BEATER
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DRIVE CHAIN
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UPPER BEATER
DRIVE CHAIN

key	Qty	Description	Part Number	
			540 PTO	1000 PTO
1	1	Cross-shaft sprocket	76610	76640
2	1	Main beater sprocket	76600	76630
3	1	Upper beater sprocket	76127	
4	1	4 bolt flange bearing housing, Cross-shaft	76086	
5	1	Bearing insert	76372	
	1	Bearing Assembly, Keys 4 & 5	76079	
6	1	Cross-shaft housing	20092	
7	5	Special Heavy washer	79029	
8	AR	Bolts 1/2 x 1 (3), lockwasher (3)		
9	AR	Bolts 1/2 x 5 1/2 (2), SAE flat washer (2), lockwasher (2)		
10	AR	Bolts 1/2 x 2 (2), SAE flat washer (4), locknut (2)		
11	AR	Bolts 1/2 x 5 (3), SAE flat washer (3), lockwasher (3)		
12	4	Spacer	70504	
13	1	Main beater drive chain, double 60 roller chain 60-2 x 92 (540) 60-2 x 96 (1000)	76303	76304
14	1	Upper beater drive chain, single 60 roller chain, 60-1 x 92	76087	
15	1	Main beater chain tightner block	76350	
16	2	Special Washer 2.25 X .531	79029	
17	2	Threaded block for chain tightener	76330	
18	1	Upper beater chain tightener block	76340	
19	AR	Bolts 1/2 x 1 1/2 (2), lockwasher (2)		
20	AR	Bolts 1/2 x 4 1/2 (1), lockwasher (1)		
21	AR	Bolts 1/2 x 4 (1), lockwasher (1)		
22	1	Door for cross-shaft housing	70515	
23	AR	Bolts 5/16 x 3/4 (2), SAE flatwasher (2), lockwasher (2)		
		Chain Tightener Assembly, Main Beater, Includes keys 7, 15, 16, 17, 19, 20	86180	
		Chain Tightener Assembly, Upper Beater, Includes keys 7, 16, 17, 18, 19, 20	86190	

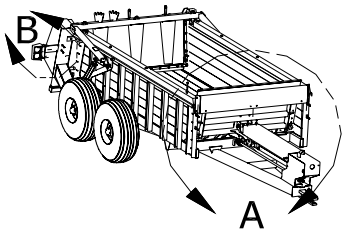

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DETAIL A
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DRIVE CHAIN

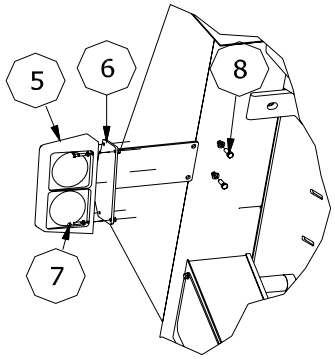
Shields, SMV sign, jack, and lights, SN 4472-5349	10.1
Shields, SMV sign, jack, and lights, SN 5382-On	10.3

key	Qty	Description		Part Number
1	1	Front Panel		20168
2	1	Cylinder Cover		N/A
3	AR	Bolts	3/8 x 1 (4), USS Washer (8), Locknut (4)	
4	AR	Bolts	3/8 x 1 (4), USS Washer (8), Locknut (4)	
5	opt	Light Kit (left side light not shown), Includes keys 6, 7, 8		20090
6	opt	Mounting brackets for lights (Right)		70445
	opt	Mounting brackets for lights (Left) * Not Shown		70433
7	AR	Bolts	1/4 x 1 (8), SAE Washer (16), Locknut (8)	
8	AR	Bolts	3/8 x 1 (4), SAE Washer (8), Locknut (4)	
9	1	Slow moving vehicle sign assembly, Includes keys 10, 11 and all hardware		88002
10	1	Mounting bracket for slow moving vehicle sign		70278
11	AR	Bolts	3/8 x 1 (2), SAE Washer (4), Locknut (2)	
12	1	Jack		445046
13	2	Wood rail		78066
14	AR	Bolts	1/2 x 4 1/2 (8), USS flat washer (16), locknut (8)	
15	1	Cover for cross-shaft under machine		76033
	AR	Bolts for cross-shaft cover	3/8 X 1 (2), Special washer - 1399-1029 (4), locknut (2)	

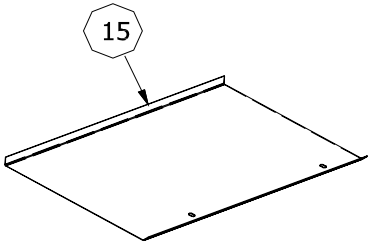


DETAIL A

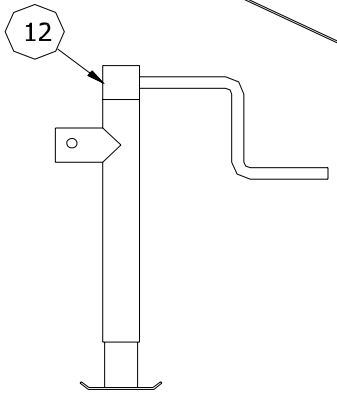


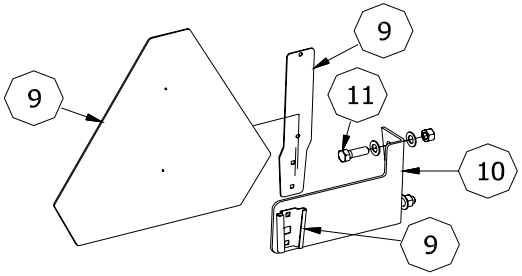


DETAIL B



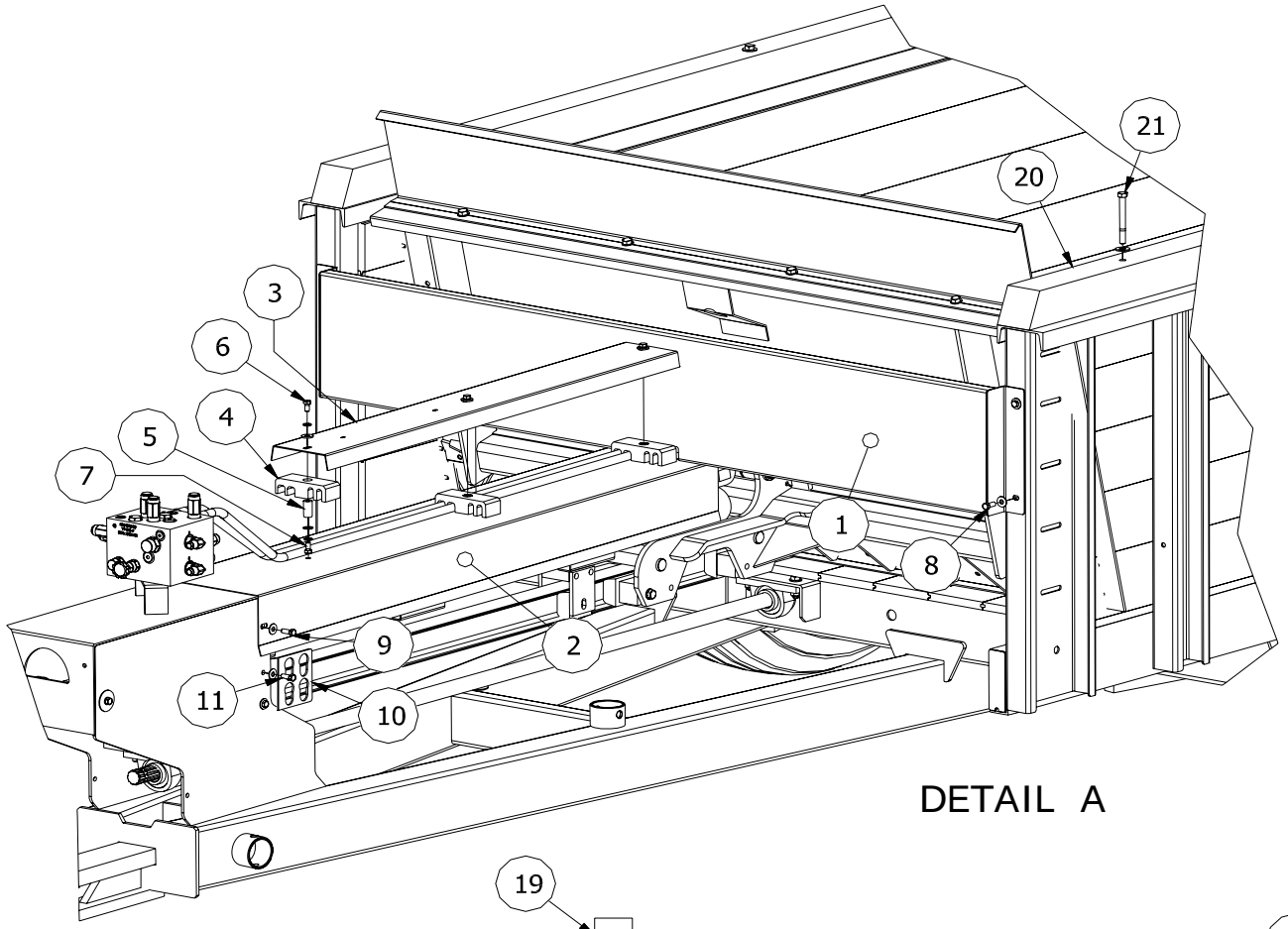
COVER FOR CROSS-SHAFT
UNDER MACHINE



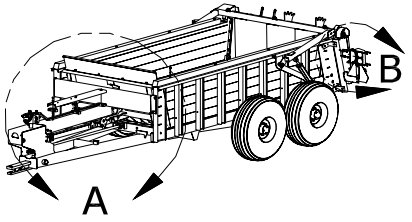


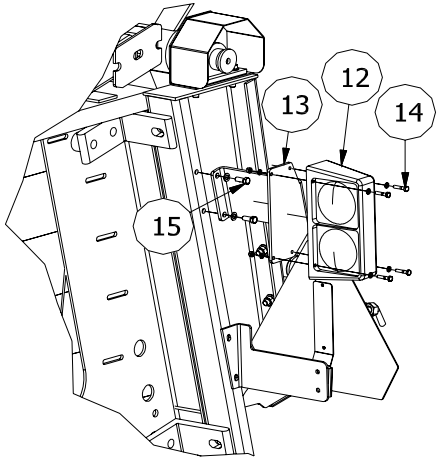
SMV SIGN AND MOUNTING

key	Qty	Description	Part Number
1	1	Front Panel	20168
2	1	Cylinder Cover	70588
3	1	Hose cover	70589
4	3	Hose Guide	78087
5	3	Stand-off for hose cover	70575
6	AR	Bolts, stand-off to hose cover	3/8 x 3/4 (3), Special washer-79344 (3), Lockwasher (3)
7	AR	Bolts, stand-off to cylinder cover	3/8 x 3/4 (3), SAE washer (3), Lockwasher (3)
8	AR	Bolts, front panel	3/8 x 1 (4), SAE washer (8), Locknut (4)
9	AR	Bolts, cylinder cover	3/8 x 1 (4), USS Washer (8), Locknut (4)
10	AR	Hose Storage Bracket	70594
11	AR	Bolts	1/2 x 1 1/2 (2), USS Washer (4), Locknut (2)
12	opt	Light Kit (Right side light not shown), Includes keys 13, and 14	20090
13	opt	Mounting brackets for lights (Left)	70445
	opt	Mounting brackets for lights (Right) * Not Shown	70433
14	AR	Bolts	1/4 x 1 1/4 (8), SAE Washer (16), Locknut (8)
15	AR	Bolts	3/8 x 1 1/4 (4), SAE Washer (8), Locknut (4)
16	1	Slow moving vehicle sign assembly, Includes keys 17, 18 and all hardware	88002
17	1	Mounting bracket for slow moving vehicle sign	70278
18	AR	Bolts	3/8 x 1 1/4 (2), SAE Washer (4), Locknut (2)
19	1	Jack	445046
20	2	Wood rail	SOURCE
21	AR	Bolts	1/2 x 4 1/2 (8), USS flat washer (16), locknut (8)
22	1	Cover for cross-shaft under machine	76033
	AR	Bolts for cross-shaft cover	3/8 X 1 (2), Special washer - 1399-1029, locknut (2)

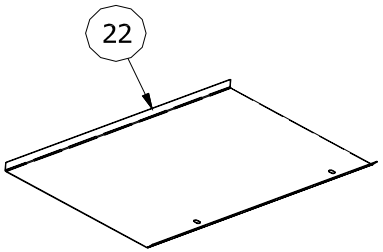


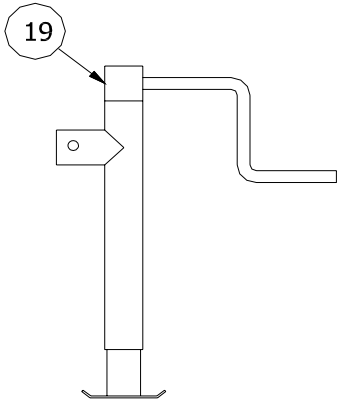
DETAIL A

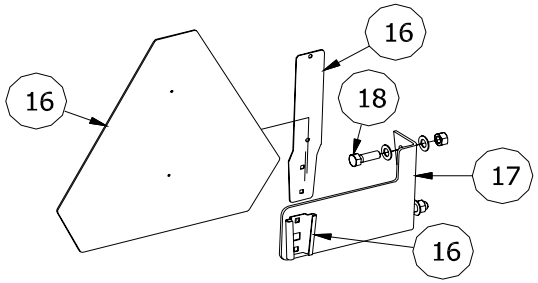




DETAIL B

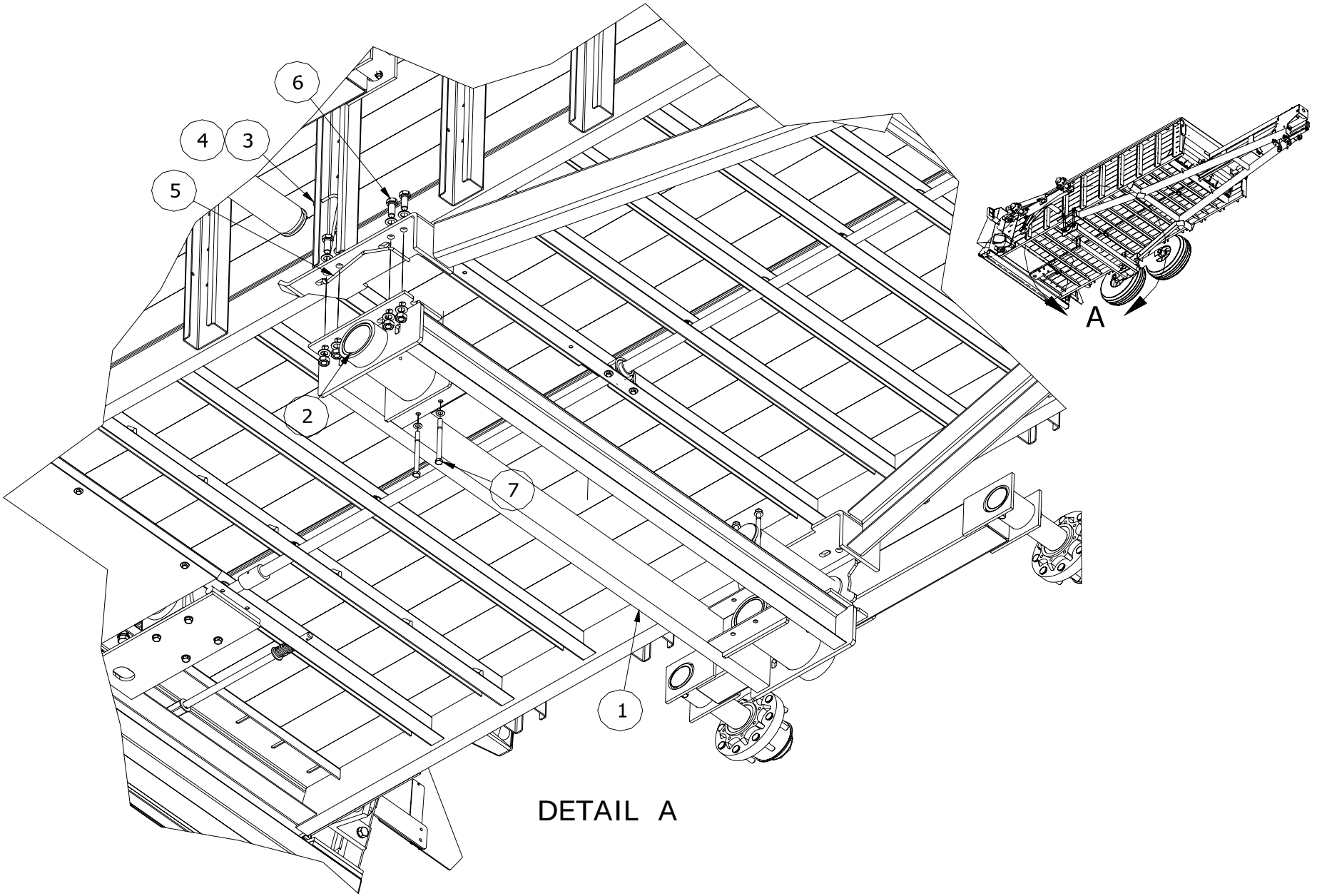




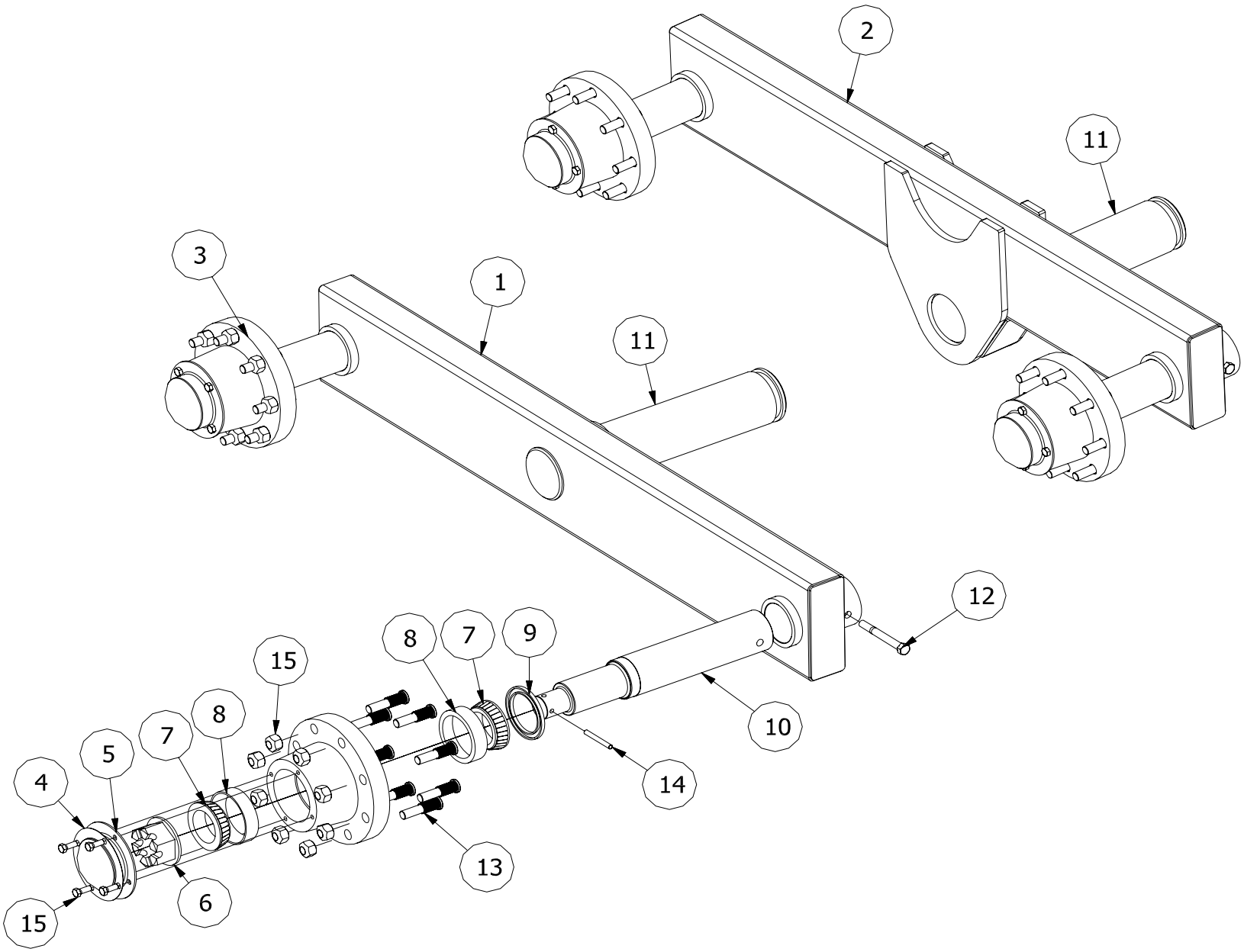


Axles	11.1
Spindles and Hubs	11.3
Wheels	11.5

key	Qty	Description	Part Number
1	1	Axle Frame	20149
2	4	Tandem Bushing	1399-1017
3	2	L-Fitting for grease hose	77510
4	2	Grease Fitting	N/A
5	2	Grease Hose 9913-1086-036	
6	AR	Bolts	3/4 x 2 1/2 (8), SAE Washer (16), Locknut (8)
7	AR	Bolts	1/2 x 7 (4), SAE Washer (8), Locknut (4)


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DETAIL A

key	Qty	Description	Part Number
1	2	Tandem Axle (Standard)	20065
2	Opt	Tandem Axle, 6" Drop, (Right)	20066R
		Tandem Axle, 6" Drop, (Left)	20066L
		Tandem Axle, 6" Drop, Long Spindle, (Right)	20067R
		Tandem Axle, 6" Drop, Long Spindle, (Left)	20067L
3	4	Complete Hub (Bearings, Seals, Bolts, Cap)	1014-1115
4	4	Dust cap	422132
5	4	Gasket	422133
6	4	Spindle nut	500130
7	8	Inner and Outer Bearing Cone	428001
8	8	Inner and Outer Bearing Cup	428002
9	4	Seal	422168
10	4	12k Spindle	72033
	opt	12k Spindle, Long	72034
11	2	Tandem Spindle	72086
12	AR	Bolts	1/2 x 4 1/2 (4), Locknut (4)
13	AR	Press-in Wheel bolts	72040.8
14	4	Spring Pin	5/16 x 2 3/4
		Bearing Kit, 12k Hub, Includes keys 7 to 11	20077
15	32	Wheel Nut	422118


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Please Contact Hydra-Spread About Wheel and Tire Packages and for Replacments.