



SnowFire System™

Owners Manual

REV: 2024.6.7



Kage Limited Warranty

Kage Innovation will repair or, at the option of Kage Innovation, replace those parts which prove defective due to material or workmanship under normal use for a period of two (2) years from the date of retail sale or date of invoice from Kage Innovation, whichever is later. Expendable items, such as rubber, or polyurethane are excluded from this warranty.

Kage Innovation warrants that the products manufactured by us to be in accordance with our published specifications or those specifications agreed to by us in writing at the time of sale. The obligation of Kage Innovation is expressly limited to repairing or replacing, at its option, any product not meeting such specifications within the warranty period.

LIMITATIONS OF WARRANTY AND DAMAGES

KAGE INNOVATION MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE HEREOF.

IN NO EVENT SHALL KAGE INNOVATION, BE HELD LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR DAMAGES RESULTING FROM MISAPPLICATION, ABUSE, MISUSE, ACTS OF GOD, UNAUTHORIZED ALTERATION OF THE KAGE INNOVATION PRODUCT, OR SUBSTITUTION OF PARTS NOT AUTHORIZED IN WRITING BY KAGE INNOVATION.

To obtain service under this warranty the consumer must return the defective Kage Innovation product to Kage Innovation directly, the dealer from which the product was purchased or to any authorized Kage Innovation dealer, transportation and freight charges prepaid. Only Kage Innovation dealers are authorized to perform the obligations under this warranty with pre-authorization from Kage Innovation.

No person is authorized to alter or amend this warranty or to create any warranty other than that set forth herein without the expressed written consent of Kage Innovation.

Kage Innovation reserves the right to make improvement changes on any of our products without prior notice.

Important Notice for Bobcat® Users

Please note that for Bobcat brand machines the hoses should be routed through the **upper driver side hose clamp**, with the hoses elbows angled as shown. If a second option is needed route hoses through the **passenger hose clamp** shown in the second image. Once the hose routing is complete, adjust the hose length between the plow and the machine to be taught with the plow tipped all the way forward.

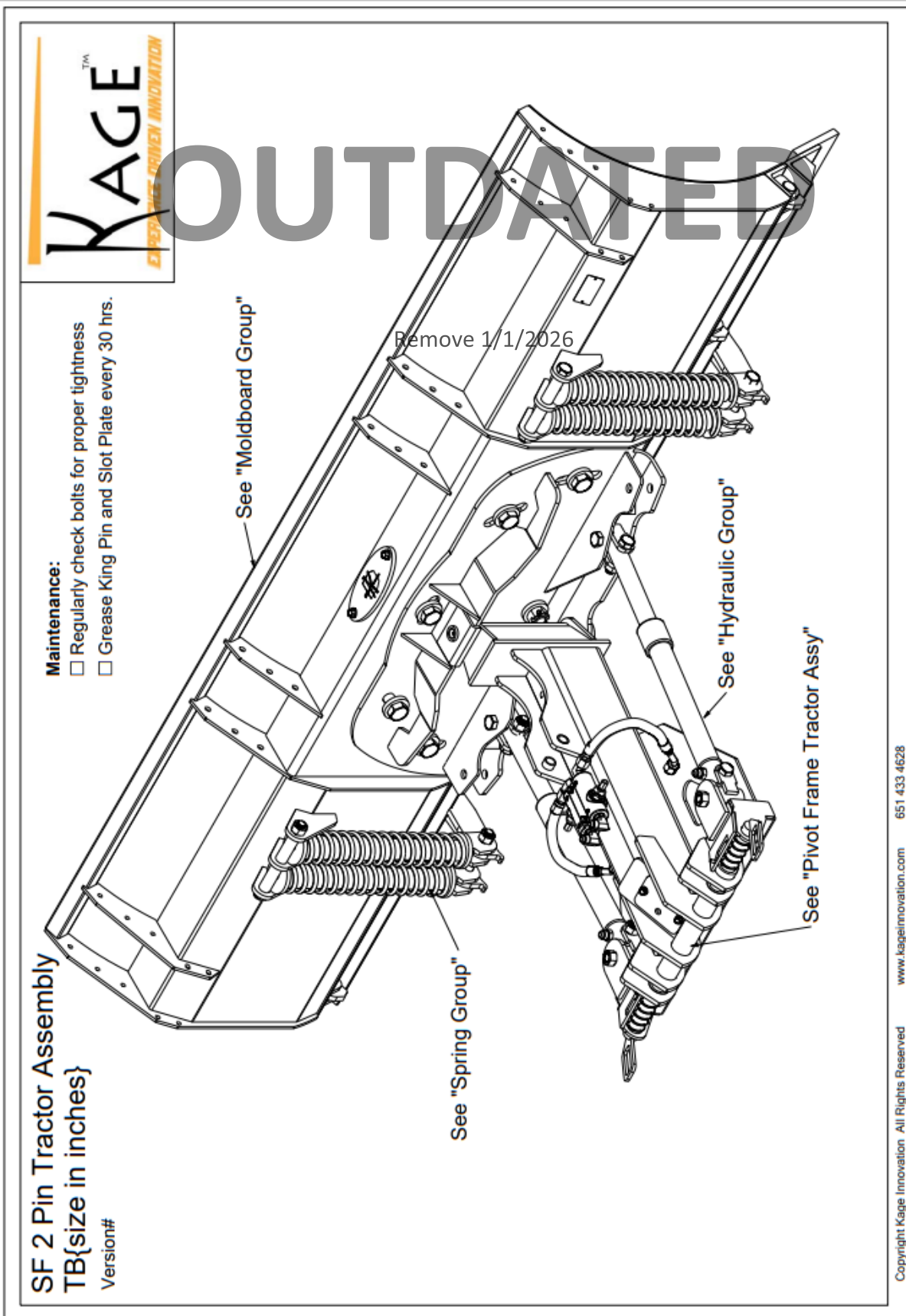


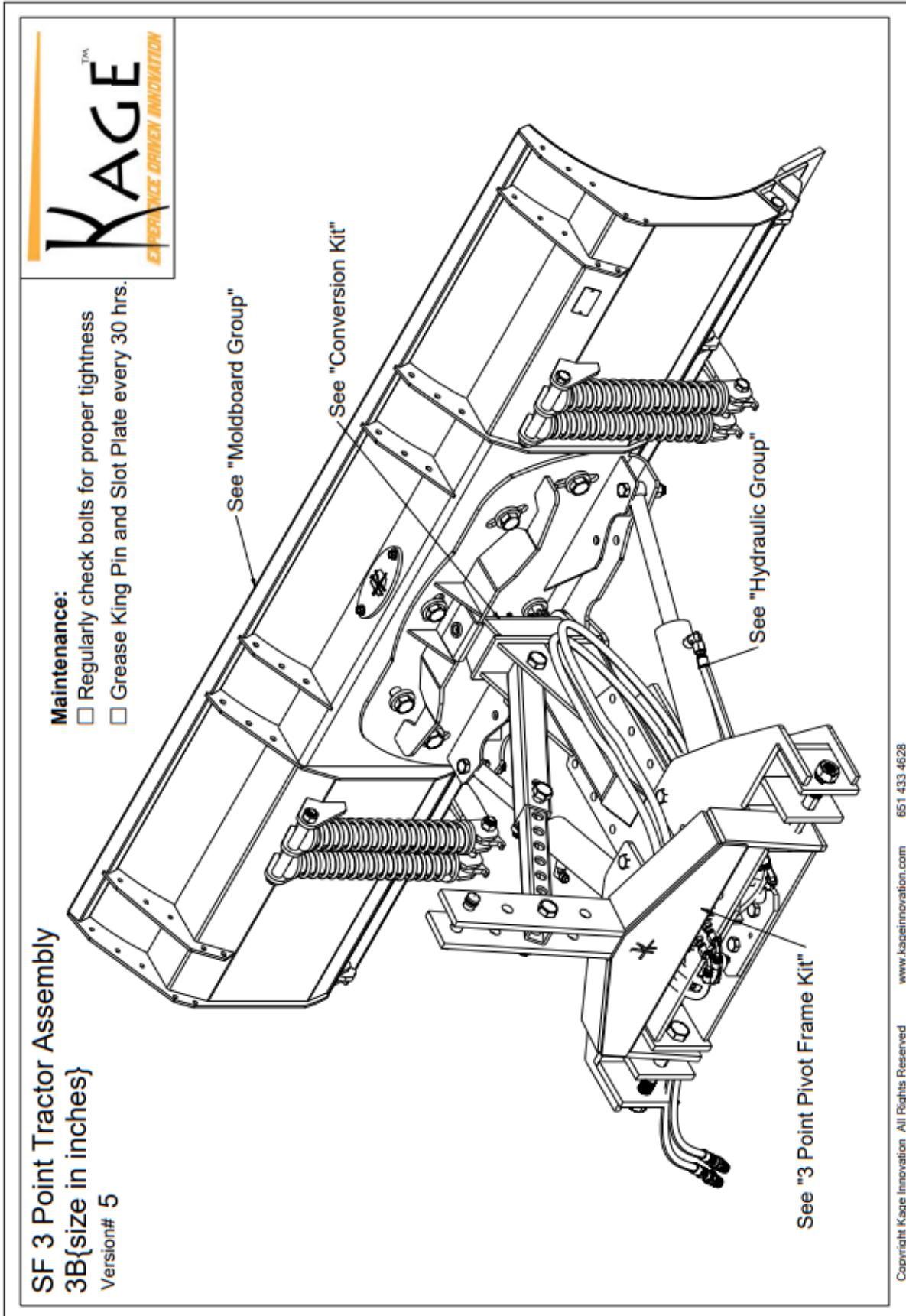
SF Skidsteer Assembly
SB{SIZEINCHES}
Version#
Version Starting Serial #


Maintenance:

- Regularly check bolts for proper tightness
- Grease King Pin and Slot Plate every 30 hrs.

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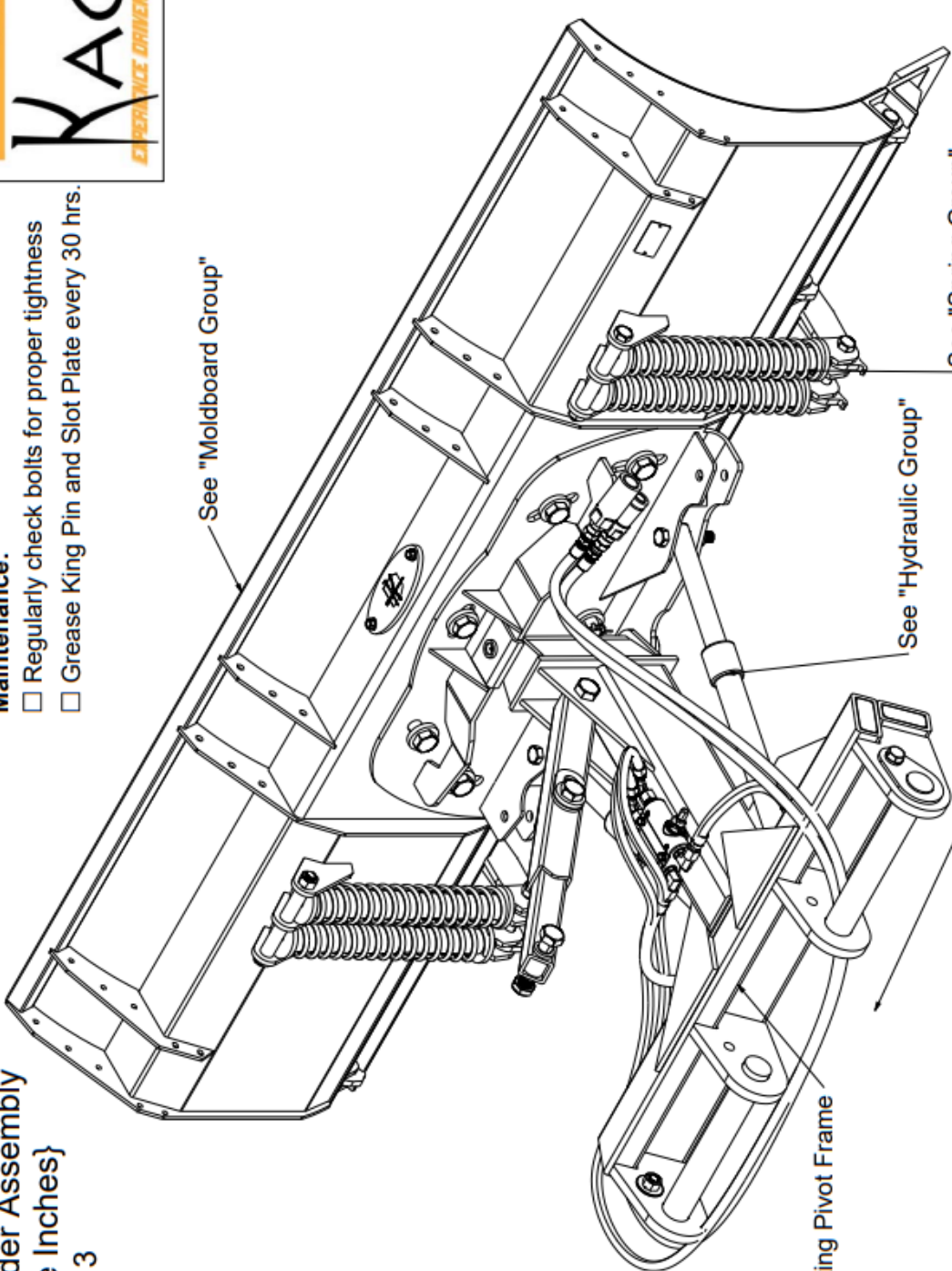




Maintenance:

- Regularly check bolts for proper tightness
- Grease King Pin and Slot Plate every 30 hrs.

SF Loader Assembly
LB{Size Inches}
Version# 13



See "Moldboard Group"

See "Hydraulic Group"

See "Spring Group"

SF Floating Pivot Frame

Select appropriate Loader Quick Attach (Not Shown)

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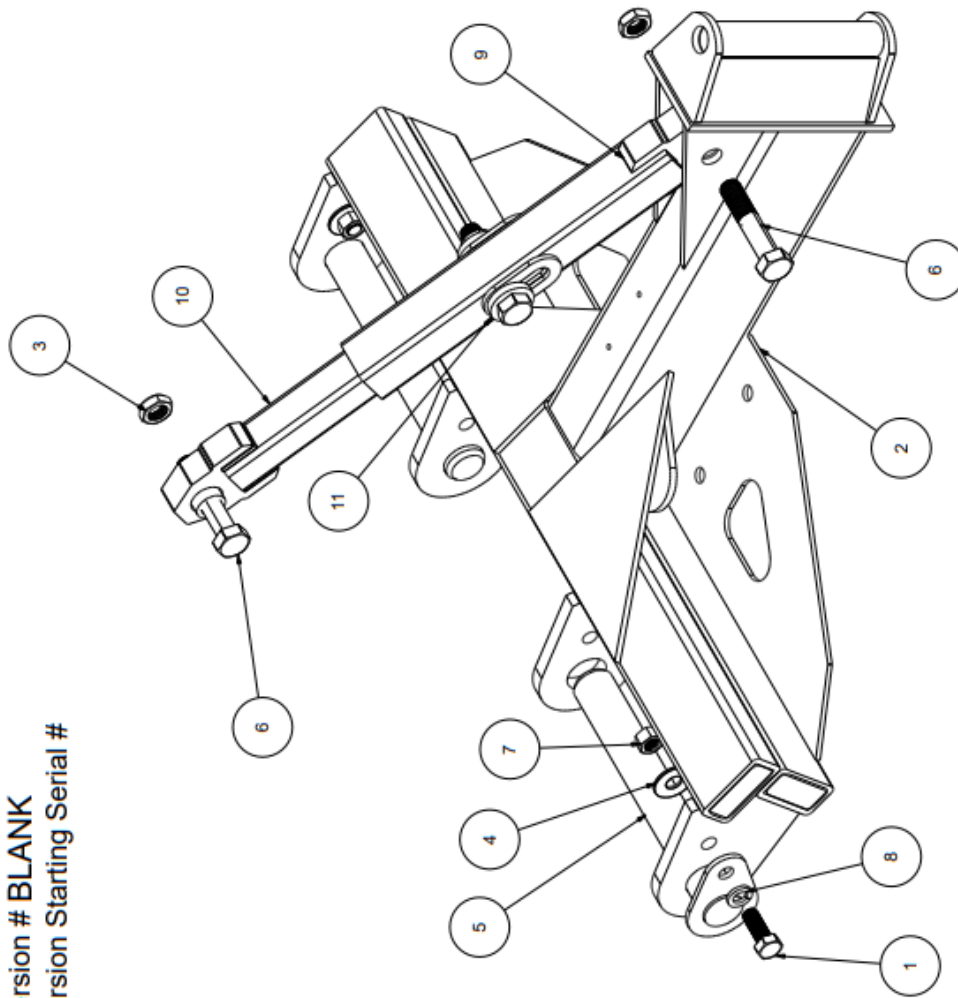
TB (Tractor Blade) 6, 8, 9, 10 Foot

Item	Part Name	Part Number	QTY
1	SF Tractor Latch	333-4875	2
2	Tractor Clamp Plate	333-5567	2
3	Hex Bolt GR8 1-8 x 8	91257A977	2
4	Tractor Pivot Bushing	333-4963	2
5	Elbow 90 1/2 MJIC x 1/2 MSAE	6801-NWO-08-08	4
6	Crossover Valve 3000	CRV-3000	1
7	Tension Pin	95755A429	2
8	Shoulder Bolt 3/4-10 x 1 x 2	91259A130	2
9	JIC x ORB Restrictor	6400R-08-08-.062	2
10	Hydro Line Cylinder Bridge	HY-209	2
11	Ratchet Jack	22590	1
12	Hex Bolt GR8 1-8 x 5	91257A965	1
13	Spring, Pin	3135	2
14	Center Locknut GR2 3/4-10	90040A147-K5	4
15	SF Tractor Pivot Frame Weldment	PF-101-TRACTOR	1
16	Hitch Pin	BP-075-0500	1
17	JIC 90 Elbow 08 x 08	6500-08-08	2
18	Hex Bolt GR8 3/4-10 x 4"	91257A851	4
19	Hex Nylock 1-8	95615A320	3
20	SF Hydro Cylinder	BK-0489-ORB-NITRO	2
22	SF Moldboard Assembly 6	SFM6	2
23	SF Moldboard Assembly 8	SFM8	2
24	SF Moldboard Assembly 9	SFM9	2
25	SF Moldboard Assembly 10	SFM10	2
27	SF Tractor Pin	333-4500	2
28	Male Ag Coupler	19-400	2
29	Crossover Line	HY-701-ORB	2
30	JIC x Pipe Adapter 08x08	2404-08-08	2
32	Hex Bolt GR5 5/16-18 x 2.5	91247A593	2
33	Lockwasher, 5/16	ROC-8076-030	2

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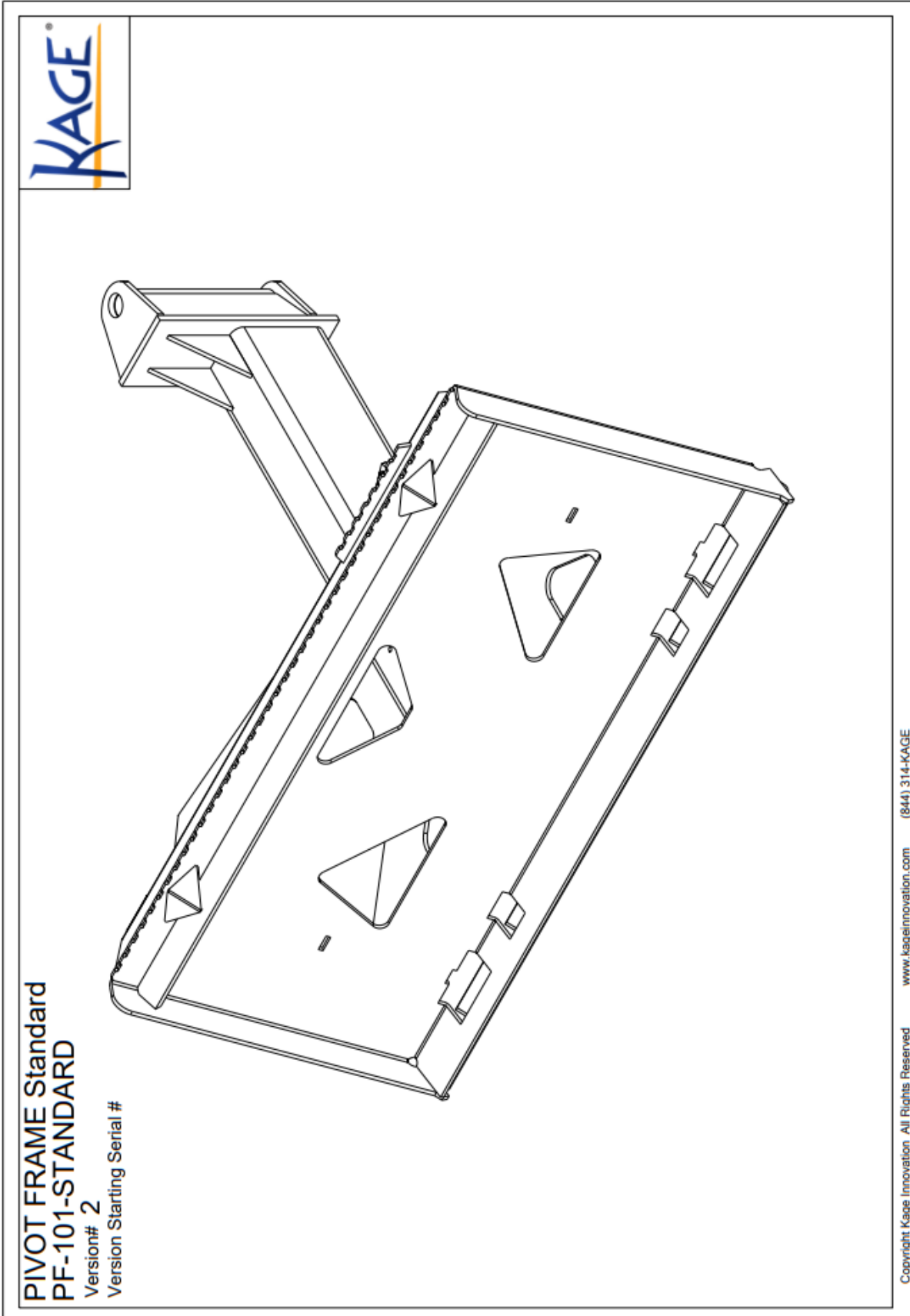
Floating Pivot Frame Assy SF
PF-101-LOADERASSY
 Version # BLANK
 Version Starting Serial #




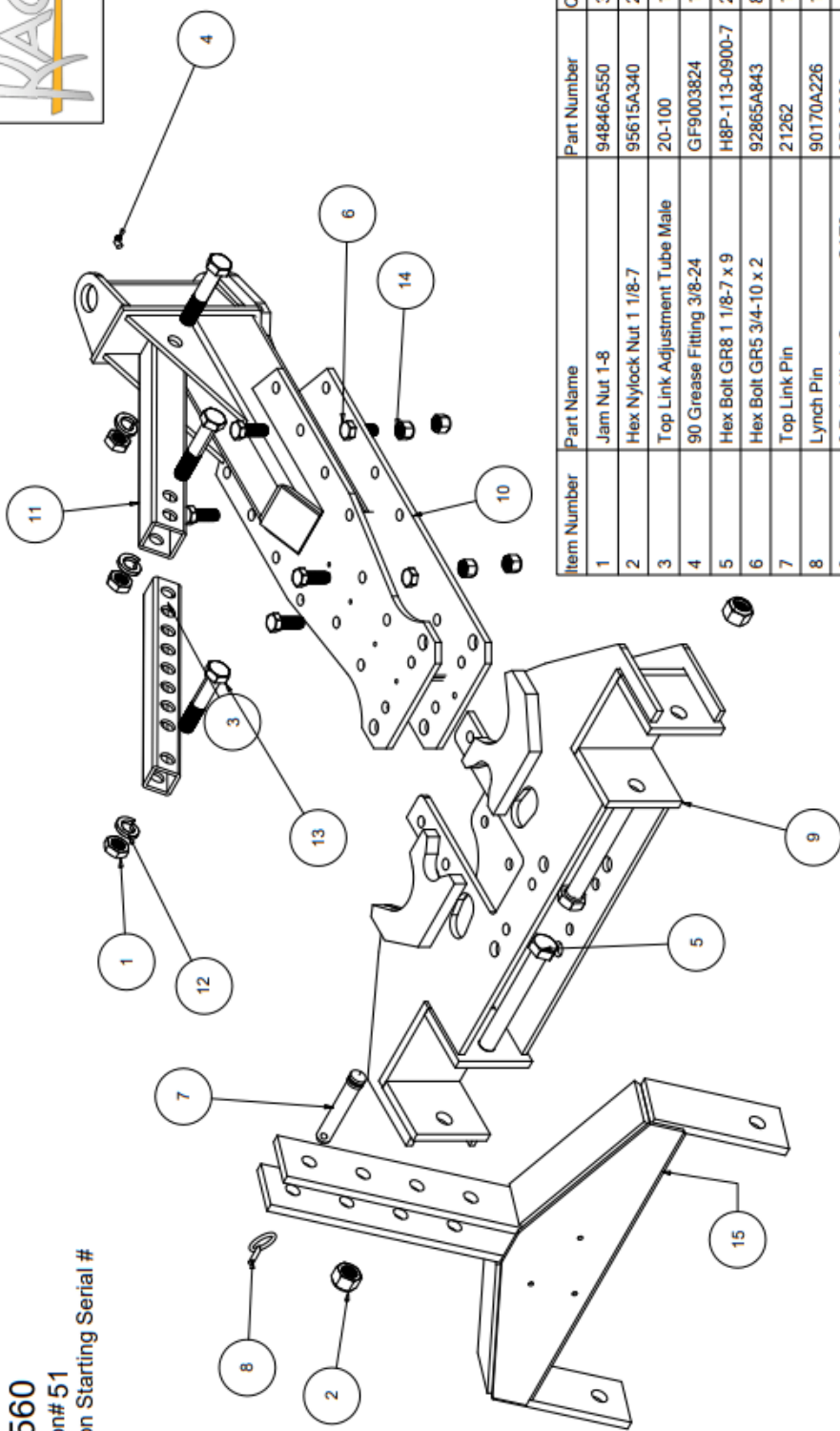
Item	Part Name	Part Number	Quantity
1	Hex Bolt GR5 3/4-10 x 2	92865A843	2
2	Pivot Frame loaders SF	PF-101-LOADER	1
3	1-8 Thin Hex Nylock Nut GR5	91342A260	3
4	3/4" Flat Washer	90108A036	2
5	Float Pin	67-001	2
6	Hex Bolt GR8 1-8 x 5	91257A965	3
7	CenterLocknut GR2 3/4-10	90040A147-K5	2
8	Lockwasher 3/4	91102A036	2
9	Slotted Female Weldment	126-1	1
10	Male Tube Weldment	128-1	1
11	1-.375 washer	13W	2

Weight LBS 265.16

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Item Number	Part Name	Part Number	Quantity
1	Jam Nut 1-8	94846A550	3
2	Hex Nylock Nut 1 1/8-7	95615A340	2
3	Top Link Adjustment Tube Male	20-100	1
4	90 Grease Fitting 3/8-24	GF9003824	1
5	Hex Bolt GR8 1 1/8-7 x 9	H8P-113-0900-7	2
6	Hex Bolt GR5 3/4-10 x 2	92865A843	8
7	Top Link Pin	21262	1
8	Lynch Pin	90170A226	1
9	3 Point Hitch Converter CAT2	8P9-8200	1
10	PIVOT FRAME GROUP 3 POINT	KBW-PF-3POINT	1
11	Top Link Adjustment Tube Female	20-120	1
12	Lockwasher 1"	91102A038	3
13	Hex Bolt GR8 1-8 x 5	91257A965	3
14	Hex Nylock Nut GR 5 3/4-10	95615A270	8
15	3 Point Mast	12-200	1

3 Point Pivot Frame Kit
KT-560
 Version# 51
 Version Starting Serial #

WEIGHT LBS370

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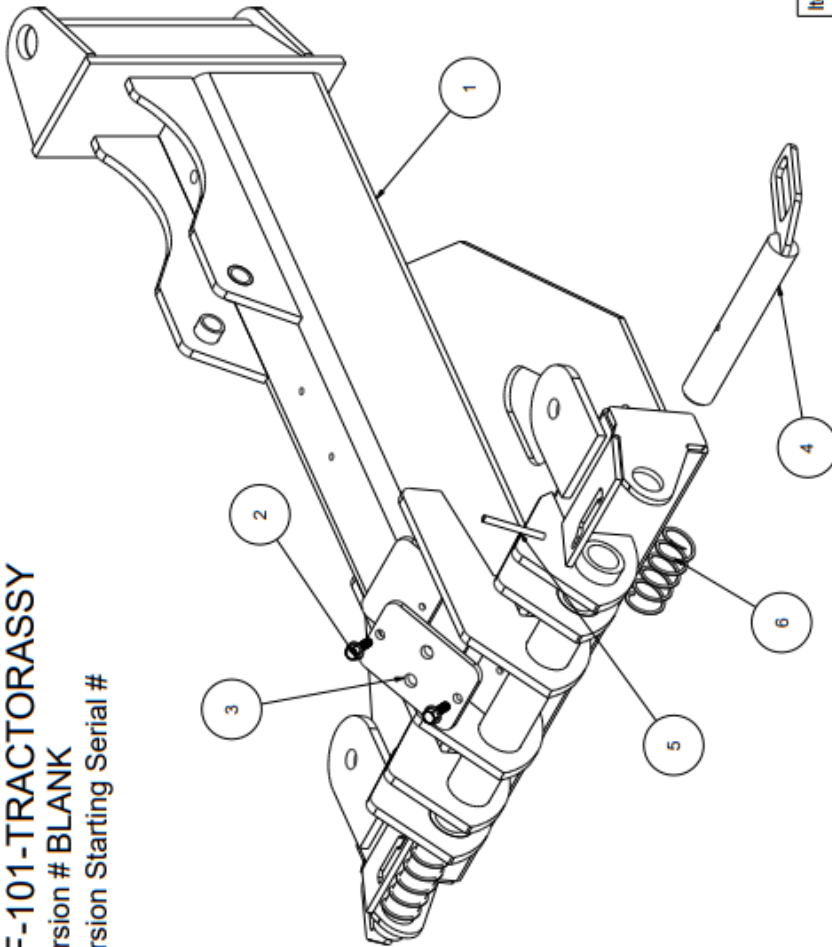
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OUTDATED

Remove 1/1/2026


Pivot Frame Tractor Assy
 PF-101-TRACTORASSY
 Version # BLANK
 Version Starting Serial #

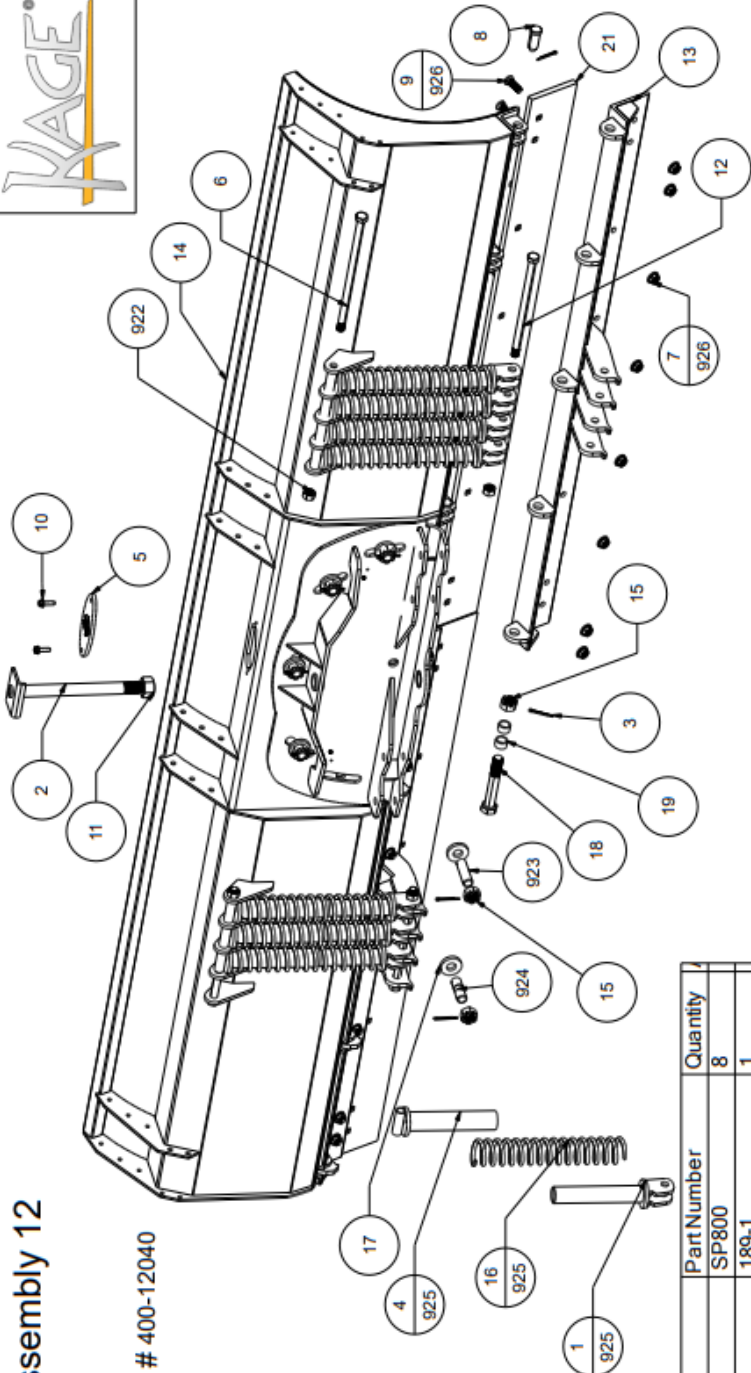


Item	Part Name	Part Number	Quantity
1	PIVOT FRAME Tractor	PF-101-TRACTOR	1
2	Flange Hex Bolt GR5/16 - 18 x 1	92979A253	2
3	Bolt Flange	378-4	1
4	Locking Pin	PVN-2-A	2
5	Tension Pin	95755A429	2
6	Spring, Pin	3135	2

Weight LBS 135.76

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Weight LBS 1022.67

SF Moldboard Assembly 12
SFM12
 Version # 3
 Version Starting Serial # 400-12040

Item	Part Name	Part Number	Quantity
1	Spring Bottom L	SP800	8
2	KING PIN	189-1	1
3	Cotter Pin 3/16 x 2	98338A516	15
4	Spring Top L	SP900	8
5	Hole Cap	404-1	1
6	Hex Bolt Grade 2.75-10 x 15	H2Z_075_1500_10	2
7	Flange Locknut 5/8-11	3221357	16
8	Clevis Pin	98306A677	8
9	Plow Bolt 5/8-11 x 2"	90934A802	16
10	Flange Hex Bolt 3/8 - 16 - 1.25	92979A348	2
11	Hex Locknut 1.25-7	93470A540	1
12	Hex Bolt Grade 2.75-10 x 13	H2Z_075_1300_10	2
13	12 SF Base Angle 6	214-12	2
14	MOLDBOARD WELDMENT 12	SBM-12	1
15	Slotted Nut 1-8	97190A040-K8	7

Item	Part Name	Part Number	Quantity
16	Spring 17	SP21	8
17	1-.375 washer	13W	6
18	Hex Bolt GR8 1-8 x 6.5 w Hole	91257A970-K5	1
19	Stop Bushing	909-4	2
20	SLOT PLATE	153	1
21	Cutting Edge 6ft	SBC72	2
922	CenterLocknut GR2 3/4-10	90040A147-K5	4
923	GR8 Stud 1-8	66-100	1
924	GR8 Stud Short 1-8	77-200	5
925	Spring Group Complete	SP990	0
926	Cutting Edge Bolt & Locknut Kit	PB582-SB72	0

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SF Moldboard Assembly 10
SFM10
 Version # 3
 Version Starting Serial # 400-10937

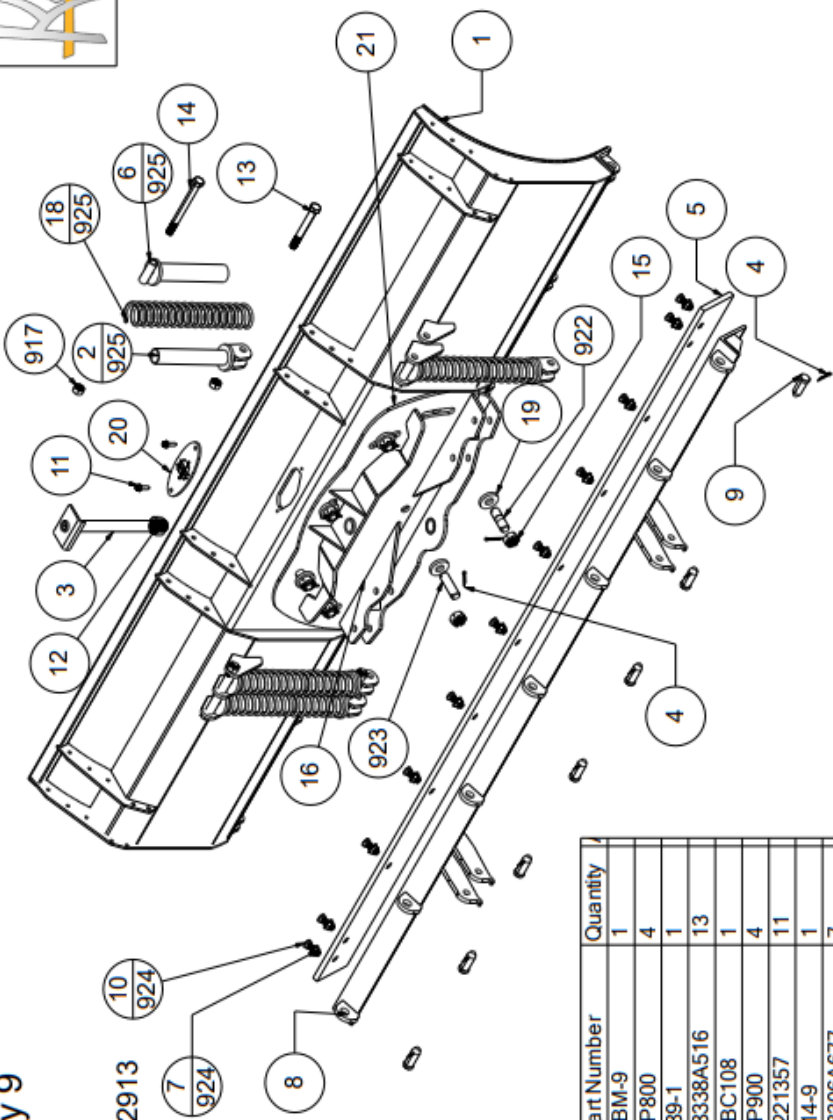
Item	Part Name	Part Number	Quantity
1	Spring Bottom L	SP800	4
2	KING PIN	189-1	1
3	Cotter Pin 3/16 x 2	98338A516	13
4	Spring Top L	SP900	4
5	Hole Cap	404-1	1
6	SLOT PLATE	153	1
7	Flange Locknut 5/8-11	3221357	14
8	Clevis Pin	98306A677	7
9	Flw Bolt 5/8-11 x 2"	90934A802	14
10	Flange Hex Bolt 3/8 - 1.25	92979A348	2
11	Hex Locknut 1.25-7	93470A540	1
12	MOLDBOARD WELDMENT 10	SBM-10	1
13	Hex Bolt GR5 3/4-10 x 6	91247A859	2
14	Hex Bolt GR5 3/4-10 x 8	91247A863	2
15	Cutting edge 5ft	SBO60	2
16	Slotted Nut 1-8	97190A040-K8	6
17	Base Angle SF 10	214-10	1
18	Spring 17	SP21	4
19	1-.375 washer	13W	6

Item	Part Name	Part Number	Quantity
920	Center Locknut GR2 3/4-10	90040A147-K5	4
921	GR8 Stud 1-8	66-100	1
922	GR8 Stud Short 1-8	77-200	5
923	Spring Group Complete	SP990	0
924	Cutting Edge Bolt & Locknut Kit	PB582-SB120	0

Weight LBS 821.00

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Weight LBS 764.00

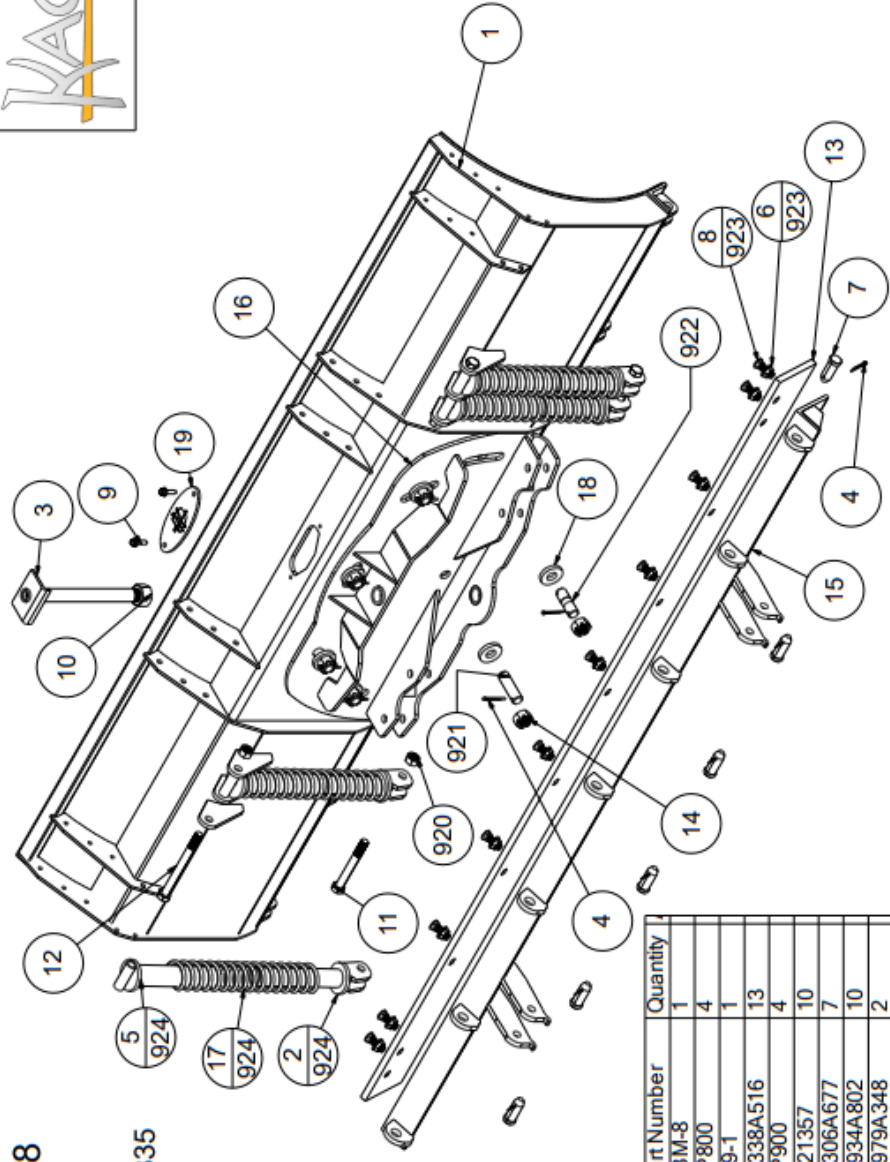
SF Moldboard Assembly 9
SFM9
 Version # 2
 Version Starting Serial # 400-52913

Item	Part Name	Part Number	Quantity
1	MOLDBOARD WELDMENT 9	SBM-9	1
2	Spring Bottom L	SP800	4
3	KING PIN	189-1	1
4	Cotter Pin 3/16 x 2	98338A516	13
5	Cutting edge 9ft	SBC108	1
6	Spring Top L	SP900	4
7	Flange Locknut 5/8-11	3221357	11
8	Base Angle SF 9	214-9	1
9	Clevis Pin	98306A677	7
10	Plow Bolt 5/8-11 x 2"	90934A802	11
11	Flange Hex Bolt 3/8 - 16 - 1.25	92979A348	2
12	Hex Locknut 1.25-7	93470A540	1
13	Hex Bolt GR5 3/4-10 x 6	91247A859	2
14	Hex Bolt GR5 3/4-10 x 8	91247A863	2
15	Slotted Nut 1-8	97190A040-K8	6
16	SLOT PLATE	153	1
917	Center Locknut GR2 3/4-10	90040A147-K5	4
18	Spring 17	SP21	4

Item	Part Name	Part Number	Quantity
19	1-.375 washer	13W	6
20	Hole Cap	404-1	1
21	Cotter Pin 3/16 x 2	98338A516	6
922	GR8 Stud Short 1-8	77-200	5
923	GR8 Stud 1-8	66-100	1
924	Bolt And Locknut Kit (#8 & #11)	PB582-SB108	0
925	Spring Group Complete	SP990	0

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Weight LBS 707.00

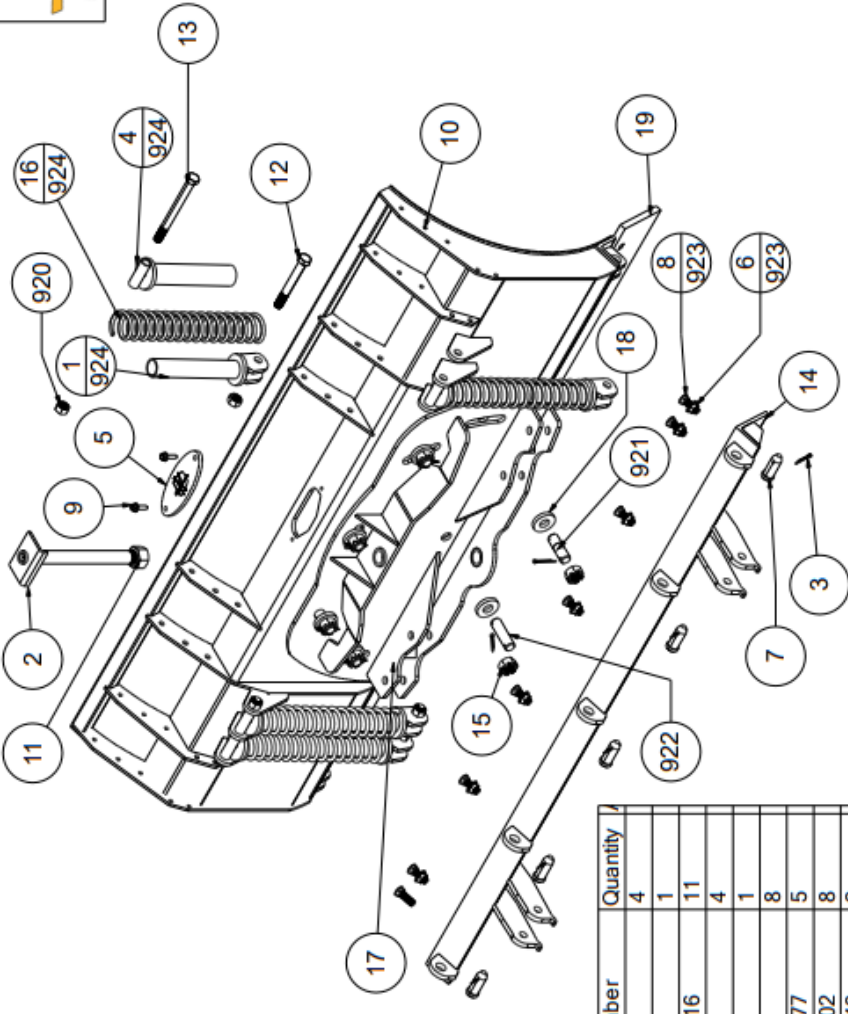
SF Moldboard Assembly 8
SFM8
 Version # 2
 Version Starting Serial # 400-55335

Item	Part Name	Part Number	Quantity
1	MOLDBOARD WELDMENT 8	SBM-8	1
2	Spring Bottom L	SP800	4
3	KING PIN	189-1	1
4	Cotter Pin 3/16 x 2	98338A516	13
5	Spring Top L	SP900	4
6	Flange Locknut 5/8-11	3221357	10
7	Clevis Pin	98306A677	7
8	Plow Bolt 5/8-11 x 2"	90934A802	10
9	Flange Hex Bolt 3/8 - 16 - 1.25	92979A348	2
10	Hex Locknut 1.25-7	93470A540	1
11	Hex Bolt GR5 3/4-10 x 6	91247A859	2
12	Hex Bolt GR5 3/4-10 x 8	91247A863	2
13	Cutting edge 8ft	SBC96	1
14	Slotted Nut 1-8	97190A040-K8	6
15	Base Angle SF 8	214-8	1
16	SLOT PLATE	153	1
17	Spring 17	SP21	4
18	1-.375 washer	13W	6

Item	Part Name	Part Number	Quantity
19	Hole Cap	404-1	1
920	Center Locknut GR2 3/4-10	90040A147-K5	4
921	GR8 Stud 1-8	66-100	1
922	GR8 Stud Short 1-8	77-200	5
923	Cutting Edge Bolt & Locknut Kit	PB582-SB96	0
924	Spring Group (see spring group)	SP990	0

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Weight LBS 588.00

SF Moldboard Assembly 6
SFM6
 Version # 2
 Version Starting Serial # 400-52267

Item	Part Name	Part Number	Quantity
1	Spring Bottom L	SP800	4
2	KING PIN	189-1	1
3	Cotter Pin 3/16 x 2	98338A516	11
4	Spring Top L	SP900	4
5	Hole Cap	404-1	1
6	Flange Locknut 5/8-11	3221357	8
7	Clevis Pin	98306A677	5
8	Plow Bolt 5/8-11 x 2"	90934A802	8
9	Flange Hex Bolt 3/8 - 16 - 1.25	92979A348	2
10	MOLDBOARD WELDMENT 6	SBM-6	1
11	Hex Locknut 1.25-7	93470A540	1
12	Hex Bolt GR5 3/4-10 x 6	91247A859	2
13	Hex Bolt GR5 3/4-10 x 8	91247A863	2
14	Base Angle SF 6	214-6	1
15	Slotted Nut 1-8	97190A040-K8	6
16	Spring 17	SP21	4
17	SLOT PLATE	153	1

Item	Part Name	Part Number	Quantity
18	1-.375 washer	13W	6
19	Cutting Edge 6ft	SBC72	1
920	CenterLocknut GR2 3/4-10	90040A147-K5	4
921	GR8 Stud Short 1-8	77-200	5
922	GR8 Stud 1-8	66-100	1
923	Bolt And Locknut Kit (#7 & #9)	PB582-SB72	0
924	Spring Group	SP990	0

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SF Moldboard Assembly 54
SFM54
 Version # 2
 Version Starting Serial #

Item	Part Name	Part Number	Quantity
1	Spring Bottom L	SP800	4
2	KING PIN	189-1	1
3	Base Angle SF 54	214-54	1
4	Cotter Pin 3/16 x 2	98338A516	9
5	Spring Top L	SP900	4
6	Hole Cap	404-1	1
7	SLOT PLATE	153	1
8	Flange Locknut 5/8-11	3221357	5
9	Clevis Pin	98306A677	3
10	Cutting Edge 54	SBC54	1
11	Plow Bolt 5/8-11 x 2"	90934A802	5
12	Flange Hex Bolt 3/8 - 16 - 1.25	92979A348	2
13	Hex Locknut 1.25-7	93470A540	1
14	Hex Bolt GR5 3/4-10 x 6	91247A859	2
15	Hex Bolt GR5 3/4-10 x 8	91247A863	2
16	MOLDBOARD WELDMENT 54	SBM-54	1
17	Slotted Nut 1-8	97190A040-K8	6
18	Center Locknut GR2 3/4-10	90040A147-K5	4
19	Spring 17	SP21	4
20	1-.375 washer	13W	6
921	Bolt And Locknut Kit (#7 & #9)	PB582-SB72	0
922	Spring Group	SP990	0

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Weight LBS 588

Quick Attach Dimension Chart SF

Fill out table with your coupler's relevant dimensions.
Send sheet to your Dealer, or Kage salesmen.

X: Marks additional width dimensions for ears on different planes than the main ears
Y: Marks diameter for additional holes on combination couplers
Z: Marks additional dimensions for combination couplers

Couplers available for use with SnowFire Kage Blades.
Use this chart to confirm which coupler will fit on your machine.
All dimensions are in inches.

Coupler	Kage Part Number	A	B	C	D	E	O.C.	X	Y	Z	Non-stocked Additional Cost
CAT IT28	28-10	21.875	1.125	2.520	20.17	2.063	19.937				
JCB 212	212	25.188	1.000	2.280	19.47	1.760	19.209	33.750			
John Deere 310	JD310	38.000	1.000	2.596	20.76	1.825	20.321				
JCB 409	409	35.125	1.000	1.650	12.32	1.590	12.289				
Takeuchi	TAK506580	37.250	1.125	1.580	12.21	1.580	12.200	33.126	1.580	9.69	
Case 221	221	9.250	1.000	2.000	20.162	2.025	20.174	42.000			
FFC	FFC	47.500	1.000	2.066	24.5	2.060	24.498				
JCB 535	535-10	40.375	1.000	2.410	24.09	1.509	23.652				
Komatsu WB140	WB140	29.375	1.000	2.030	17.09	1.810	17.687				
Volvo 356-20	356-20	39.375	1.000	2.420	24.38	2.000	24.187				
New Holland Euro	845	30.250	1.000	1.650	12.16	.920	11.750				
Universal Coupler	28-600	-	-	-	-	-	-				
Komatsu	WA100M-6	39.000	1.000	1.562	17.09	1.562	17.062				
Tak. TW95	TAK95	38.125	1.000	2.187	14.86	2.375	15.000				
Yanmar		38.250	1.000	2.000	19.750	2.000	19.750	25.250			Yes
Your Coupler											

CAT IT28

JCB 212

John Deere 310

JCB 409:
Euro: Volvo L35B
Kubota R530/R630

Takeuchi
TW50:65:80

Case 221
221

FFC
QCP-7000

New Holland Euro
845

Volvo
356-20

Komatsu
WB140

Takeuchi TW95
TAK95

Yanmar

JCB 535
535-10

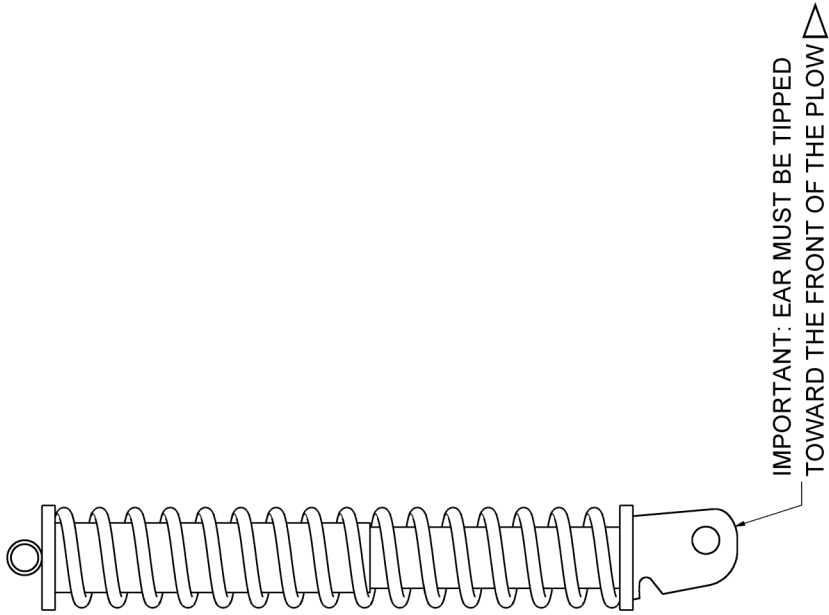
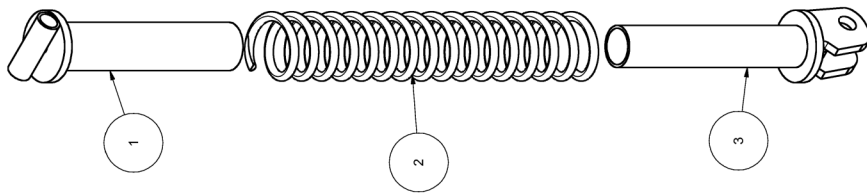
Komatsu
WA100M-6

Universal 'Skidsteer'

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Spring Group SF
 SP990
 Version# 1



Item Number	Part Name	Part Number	Quantity
1	Spring Top L	SP900	1
2	Spring 17	SP21	1
3	Spring Bottom L	SP800	1

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Floating Top Link
 101
 Version# 3
 Version Starting Serial #

Adjustment is made by moving bolt #4 between the adjustment holes.

Item	Part Name	Part Number	Quantity
1	Slotted Female Weldment	126-1	1
2	1-8 Thin Hex Nylock Nut Gr5	91342A260	3
3	Male Tube Weldment	128-1	1
4	Hex Bolt GR8 1-8 x 5	91257A965	3
5	1-.375 washer	13W	2

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Item	Part Name	Part Number	Quantity
1	Hydro Coupler, Female	FEM-501-8FP-NL	1
2	JIC x ORB Straight	6400-0-08-08	2
3	Hydro Coupler, Male	FEM-502-8FP	1
4	Hydro Line, Pass	HY-707	2
5	Beta Clamp	T3014T	1
6	JIC x ORB 90 Elbow	6801-NWO-08-08	2
7	Crossover Line	HY-701-ORB	2
8	Hex Bolt GR5 5/16-18 x 2.5	91247A593	2

Item	Part Name	Part Number	Quantity
9	JIC x ORB Restrictor	6400R-08-08-.062	2
910	Center Locknut GR2 3/4-10	90040A147-K5	4
11	Lockwasher, 5/16	ROC-8076-030	2
12	Hex Bolt GR8 3/4-10 x 4"	91257A851	4
13	Crossover Valve 3000	CRV-3000	1
14	SF Hydro Cylinder	BK-0489-ORB-NITRO	2

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Weight LBS 58.70

Item	Part Name	Part Number	Quantity	Item	Part Name	Part Number	Quantity
1	Hydro Coupler, Female	FEM-501-8FP-NL	1	8	Crossover Line	HY-701-ORB	2
2	Hydro Coupler, Male	FEM-502-8FP	1	9	Hex Bolt GR5 5/16-18 x 2.5	91247A593	2
3	JIC x ORB Straight	6400-0-08-08	2	10	JIC x ORB Restrictor	6400R-08-08-.062	2
4	Hydro Line, Pass	HY-707	2	11	CenterLocknut GR2 3/4-10	90040A147-K5	4
5	Beta Clamp	T3014T	1	12	Lockwasher, 5/16	ROC-8076-030	2
6	JIC x ORB 90 Elbow	6801-NWO-08-08	2	13	Hex Bolt GR8 3/4-10 x 4"	91257A851	4
7	2 Inch Angle Cylinder	BW-0662	2	14	Crossover Valve 3000	CRV-3000	1

Hydraulic Group SF 12_w Crossover
HYDROCO-SF12
 Version # 2
 Version Starting Serial #

Weight LBS 64.60

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KAGE

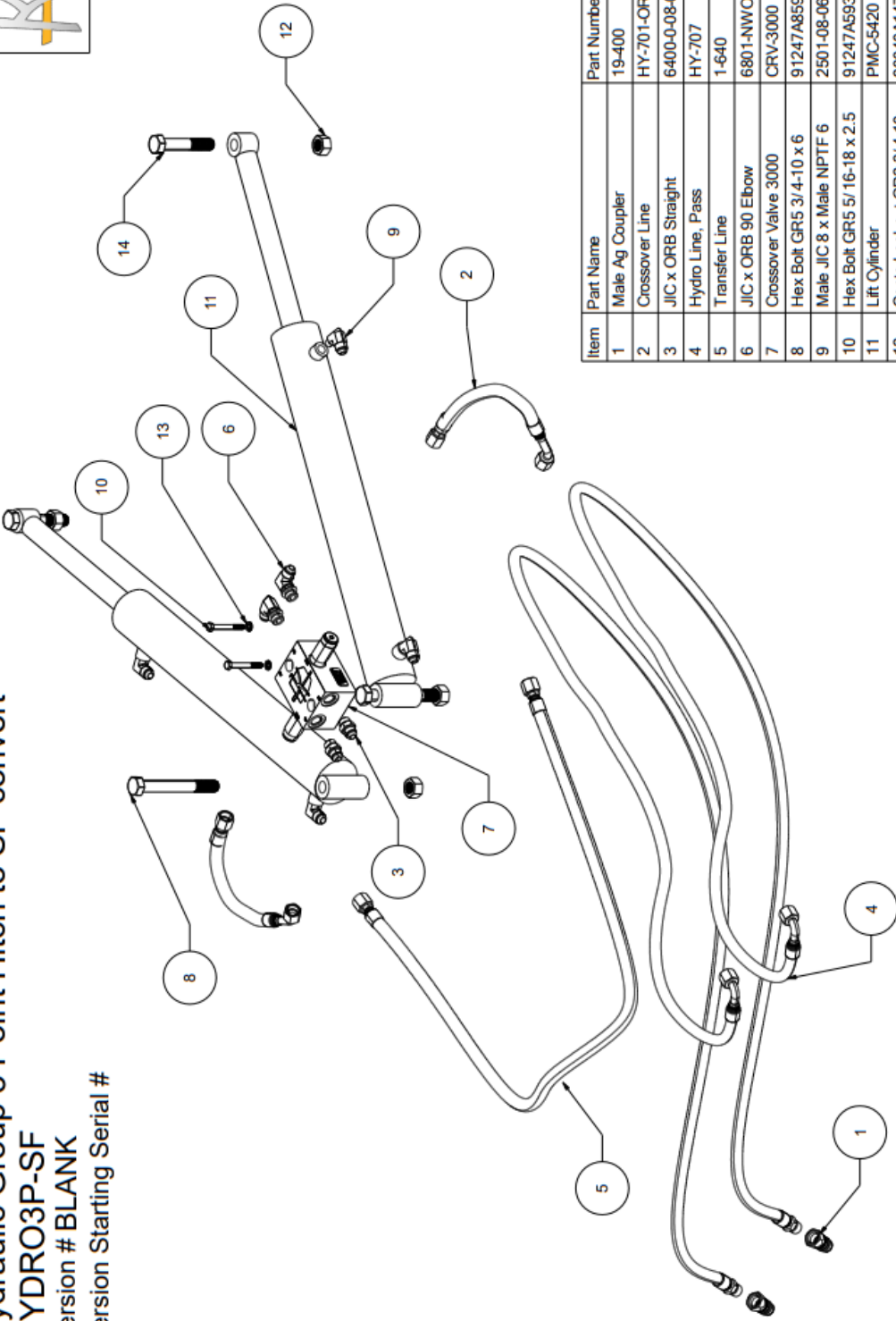
Hydraulic Group SF_W_O Crossover
HYDROWOCO-SF
 Version # _____
 Version Starting Serial # _____

Weight LBS

Item	Part Name	Part Number	Quantity
1	Hydro Line, Pass	HY-707	1
2	Hydro Coupler, Female	FEM-501-8FP-NL	1
3	Hydro Coupler, Male	FEM-502-8FP	1
4	Hydro Line, Driver	HY-708	1
5	Beta Clamp	T3014T	1
6	JIC x ORB Restrictor	6400R-08-08-.062	2
7	Hex Bolt GR5 5/16-18 x .625	92865A580	2
8	CenterLocknut GR2 3/4-10	90040A147-K5	4
9	Lockwasher, 5/16	ROC-8076-030	2
10	Hex Bolt GR8 3/4-10 x 4"	91257A851	4
11	SF Hydro Cylinder	BK-0489-ORB-NITRO	2

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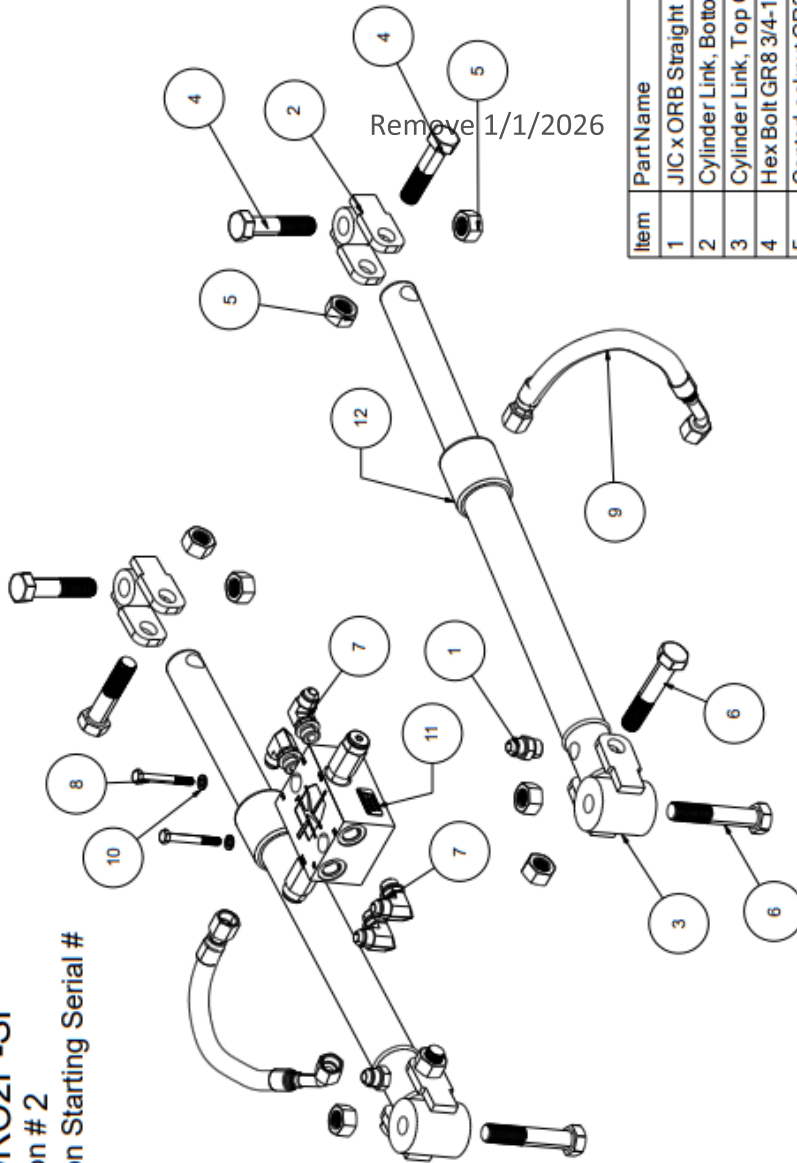
Item	Part Name	Part Number	Quantity
1	Male Ag Coupler	19-400	2
2	Crossover Line	HY-701-ORB	2
3	JIC x ORB Straight	6400-0-08-08	2
4	Hydro Line, Pass	HY-707	2
5	Transfer Line	1-640	1
6	JIC x ORB 90 Elbow	6801-NWO-08-08	2
7	Crossover Valve 3000	CRV-3000	1
8	Hex Bolt GR5 3/4-10 x 6	91247A859	2
9	Male JIC 8 x Male NPTF 6	2501-08-06	4
10	Hex Bolt GR5 5/16-18 x 2.5	91247A593	2
11	Lift Cylinder	PMC-5420	2
12	Centerlocknut GR2 3/4-10	90040A147-K5	4
13	Lockwasher, 5/16	ROC-8076-030	2
14	Hex Bolt GR8 3/4-10 x 4"	91257A851	2

Weight LBS 81.87

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OUTDATE




Item	Part Name	Part Number	Quantity
1	JIC x ORB Straight	6400-0-08-08	2
2	Cylinder Link, Bottom Group	KL-875-2	2
3	Cylinder Link, Top Group	KL-352-2	2
4	Hex Bolt GR8 3/4-10 x 3.25"	91257A848	4
5	Center Locknut GR2 3/4-10	90040A147-K5	8
6	Hex Bolt GR8 3/4-10 x 4"	91257A851	4
7	JIC x ORB 90 Elbow	6801-NWO-08-08	4
8	Hex Bolt GR5 5/16-18 x 2.5	91247A593	2
9	Crossover Line	HY-701-ORB	2
10	Lockwasher, 5/16	ROC-8076-030	2
11	Crossover Valve 3000	CRV-3000	1
12	SF Hydro Cylinder	BK-0489-ORB-NITRO	2

Weight LBS 62.84

Hydraulic Group 2 Pin Tractor
 HYDRO2P-SF
 Version # 2
 Version Starting Serial #

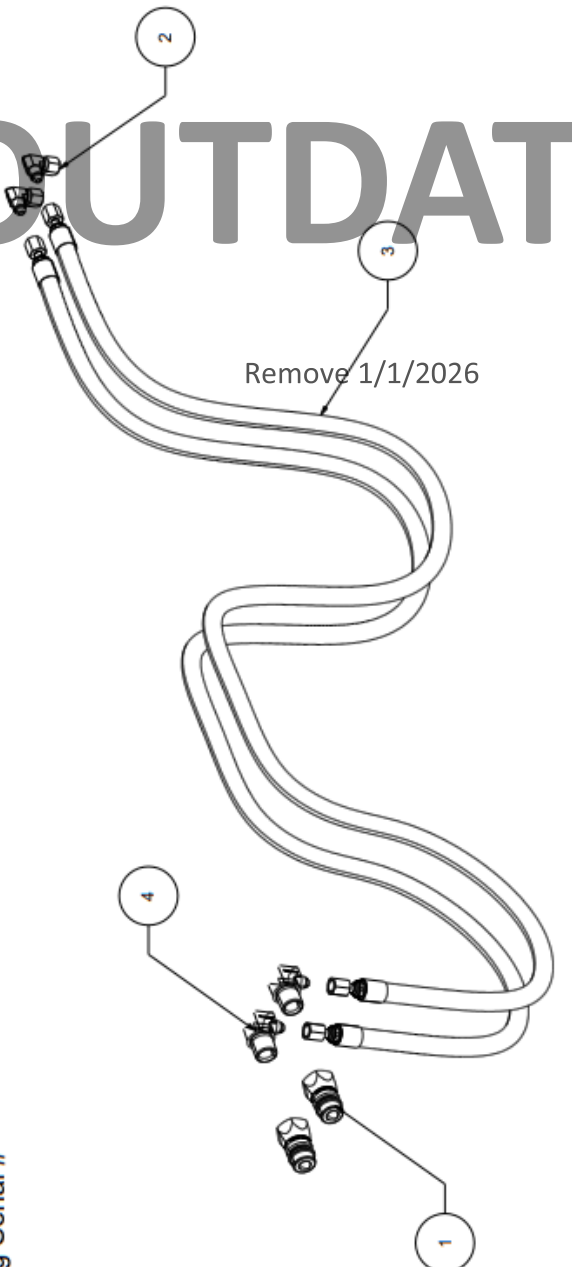
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OUTDATED

Remove 1/1/2026

Hydro Lock Adaptor SF to JD 4720
HLASF-JSK-4700
 Version # BLANK
 Version Starting Serial #



Item	Part Name	Part Number	Quantity
1	Male Ag Coupler	19-400	2
2	JIC 90 Elbow 04X04	6500-04-04	2
3	Line, Dist Block to Bulkhead LG	1-670	2
4	Male JIC x Male NPT F 90 Elbow	2501-04-08	2

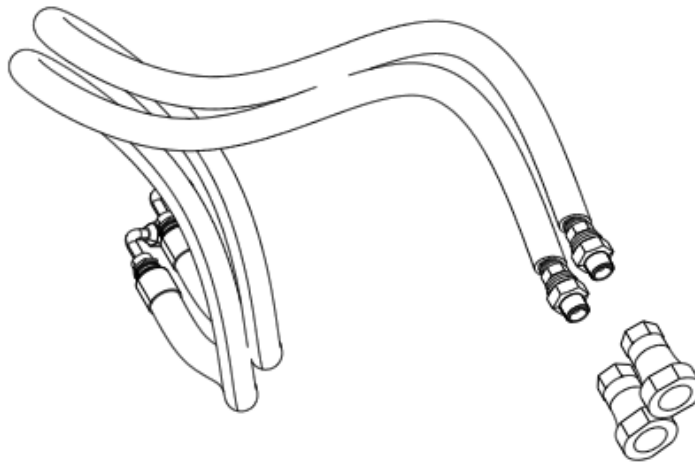
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Weight LBS 6.66



OUTDATED

Remove 1/1/2026



Hydro Lock Adaptor SF to KUB L Series
 HLASF-KSK-490
 Version # BLANK
 Version Starting Serial #

Item	Part Name	Part Number	Quantity	Alibre Part Revision
1	Line, Tractor to Pivot Frame	63-508	2	BLANK
2	Hydro Coupler, Female	G94521-0606	2	BLANK

Weight LBS 20.06

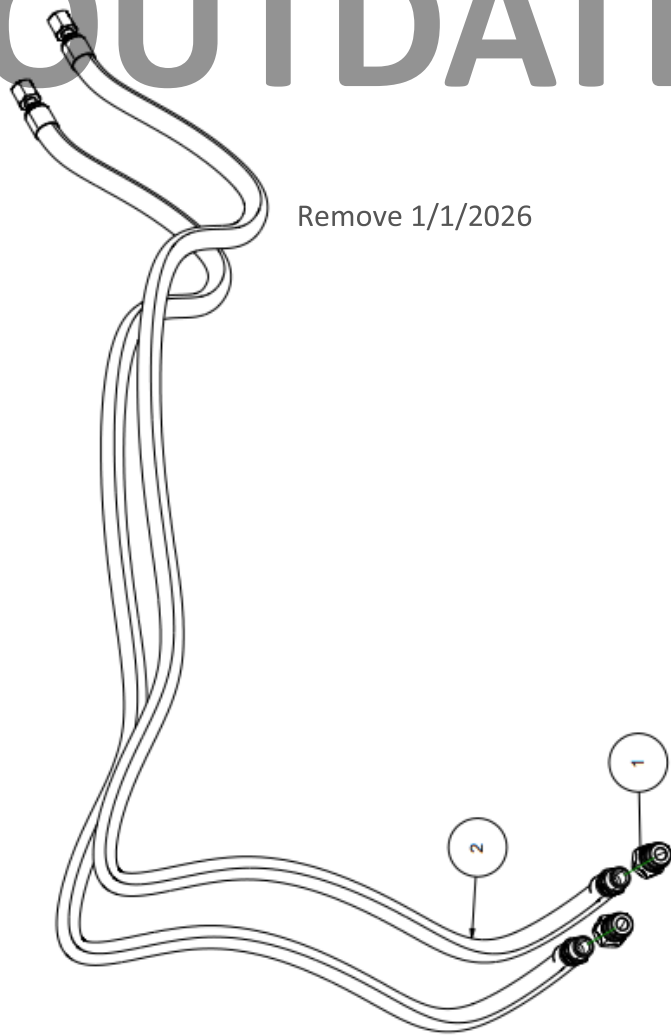
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OUTDATED


Remove 1/1/2026

Hydro Lock Adaptor SF to 3 Point Hitch
HLASF-3P
Version# 2



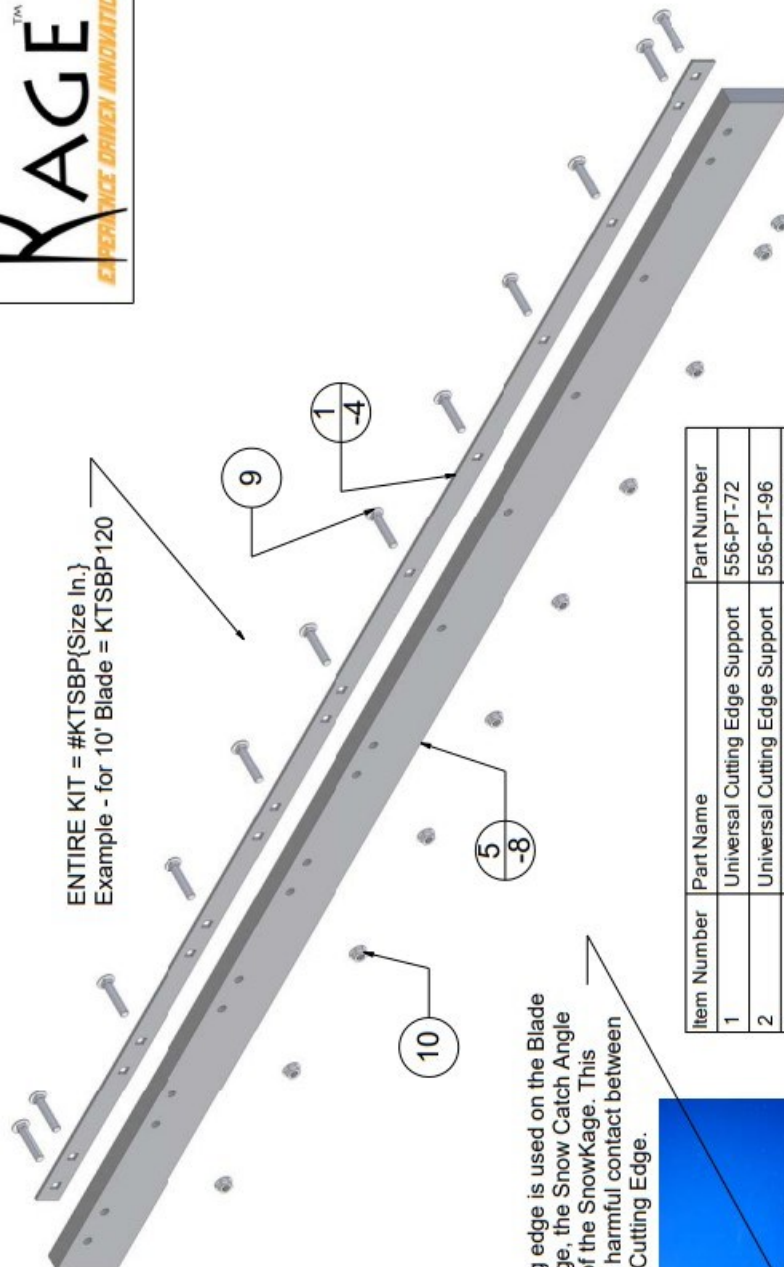
Item Number	Part Name	Part Number	Quantity
1	Male Ag Coupler	19-400	2
2	Line Valve to Dist. Block	1-765	2

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Weight in lbs
 6' = 35
 8' = 47
 9' = 53
 10' = 59

Poly Cutting Edge Kit, 6', 8', 9', 10'



ENTIRE KIT = #KTSBP{Size In.}
 Example - for 10' Blade = KTSBP120

Note: When the polyurethane cutting edge is used on the Blade and in conjunction with the SnowKage, the Snow Catch Angle must be adjusted towards the front of the SnowKage. This creates enough space and prevents harmful contact between the Snow Catch Angle and the Poly Cutting Edge.




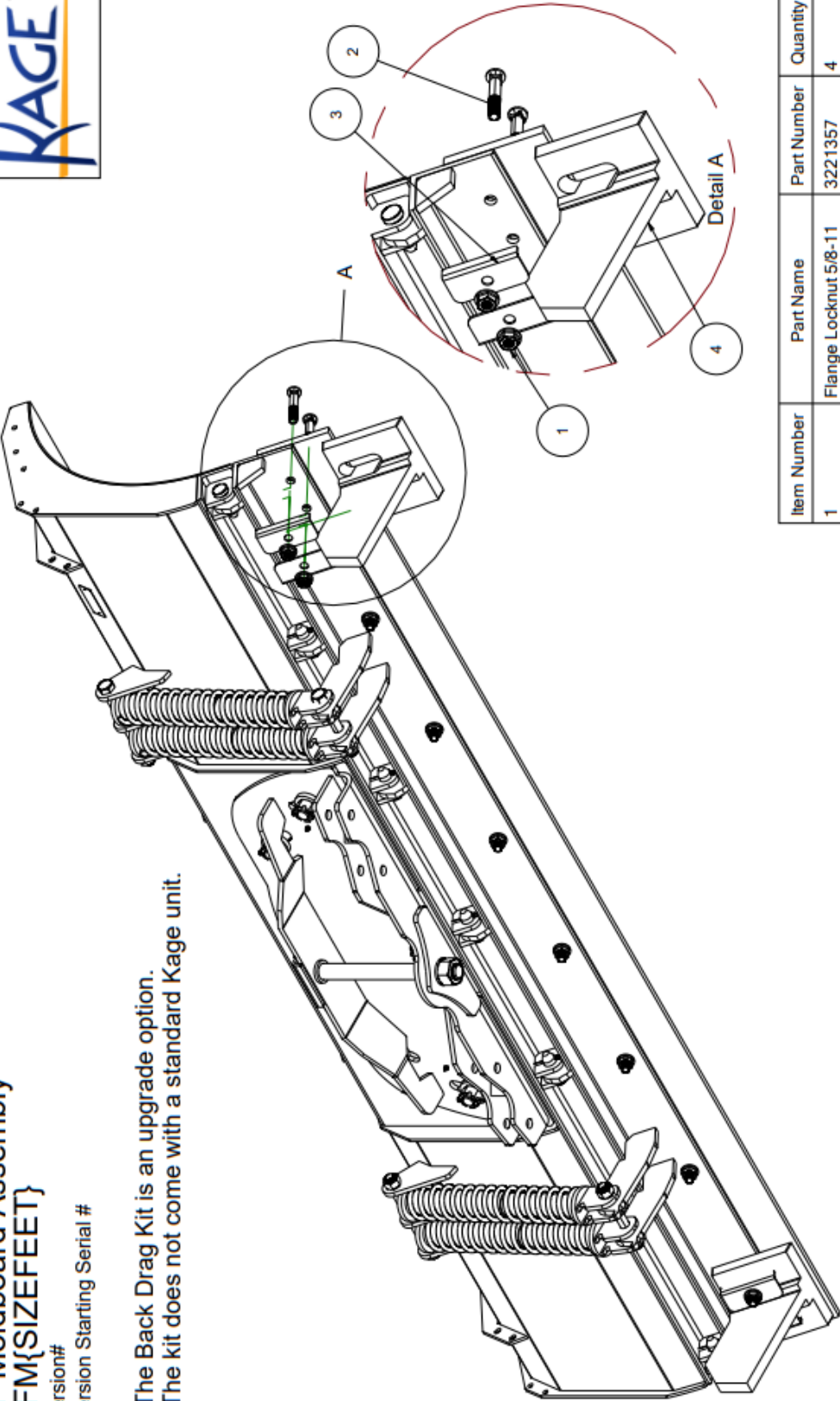
Item Number	Part Name	Part Number
1	Universal Cutting Edge Support	556-PT-72
2	Universal Cutting Edge Support	556-PT-96
3	Universal Cutting Edge Support	556-PT-108
4	Universal Cutting Edge Support	556-PT-120
5	Poly Edge	PU-UNV1-72
6	Poly Edge	PU-UNV1-96
7	Poly Edge	PU-UNV1-108
8	Poly Edge	PU-UNV1-120
9	Carriage Bolt 5/8-11 x 3	90185A818
10	Flange Locknut 5/8-11	3221357
11	Universal Cutting Edge Support	556-PT-120

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SF Moldboard Assembly
SFM{SIZEFEET}
 Version#
 Version Starting Serial #


The Back Drag Kit is an upgrade option.
 The kit does not come with a standard Kage unit.

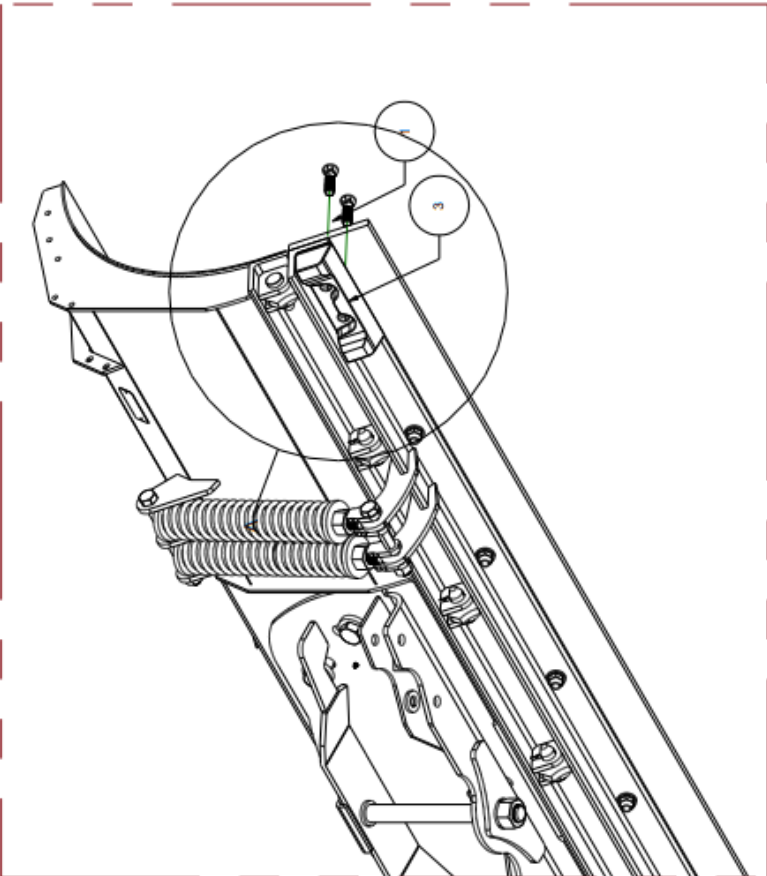
Item Number	Part Name	Part Number	Quantity
1	Flange Locknut 5/8-11	3221357	4
2	Plow Bolt 5-8 - 11 x 3 1-2	90934A808	4
3	Back Catch Backing Plate	200-12	4
4	Poly Back Catch	200-24	2

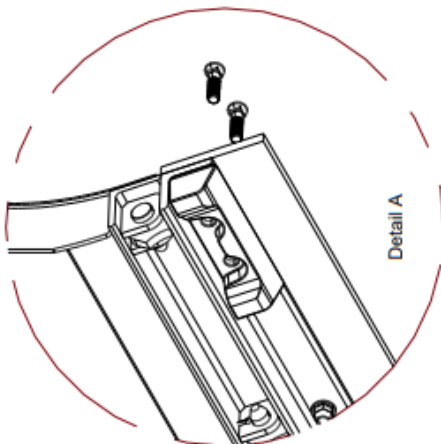
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Curb Gaurd Kit

Part / Assembly # KTCG180

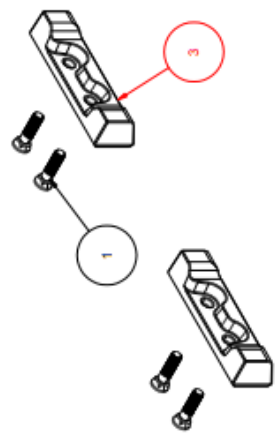






Detail A

Curb Guard Kit # KTCG180



Item Number	Part Name	Part Number	Quantity
1	Plow Bolt 5-8 - 11 x 2 1-2	90934A804	4
3	SF Curb Guard	100-11	2

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Kage Blade Cam-Lock Bracket Kit
KTKBB-2
 Version#
 Version Starting Serial #

Item Number	Part Name	Part Number	Quantity
1	Flange Hex Bolt Grade 5 1/2 - 13 x 1.25	92979A467	12
2	Kage Blade Cam-Lock Bracket	KBB-2	2
3	Flange Locknut 1/2 - 13	RF1213OFZ	12

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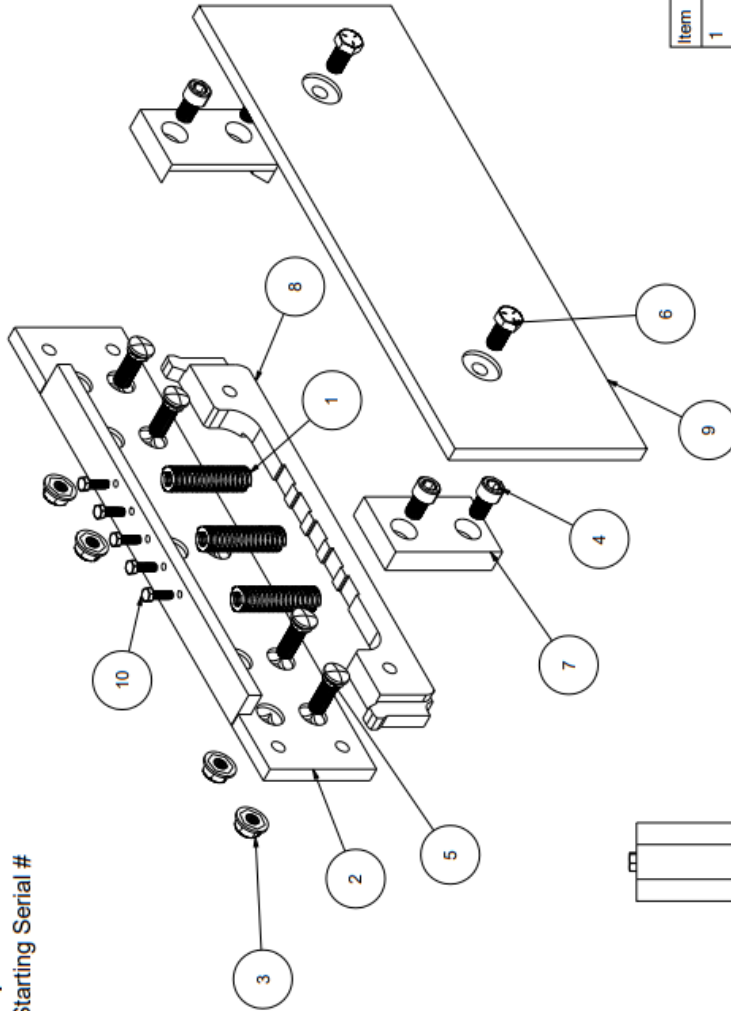


AdvantEdge SF 2 Segment


SF2S

Version# 1

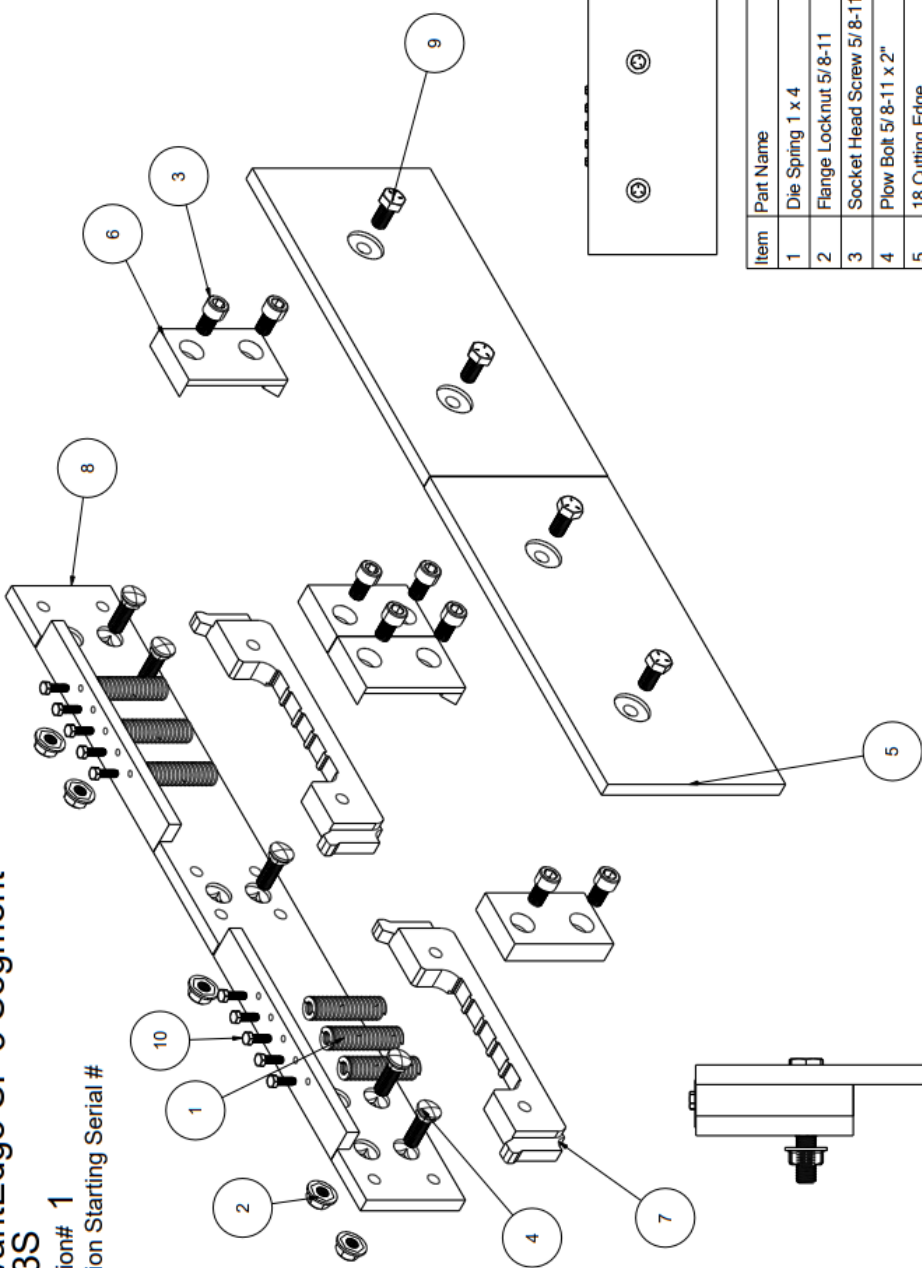
Version Starting Serial #




Item	Part Name	Part Number	Quantity
1	Die Spring 1 x 4	D-1139	3
2	BackPlate 2FT Weldment	FE24	1
3	Flange Locknut 5/8-11	3221357	4
4	Socket Head Screw 5/8-11 x 1	90128A510	4
5	Plow Bolt 5/8-11 x 2"	90934A802	4
6	Hex Bolt GR8 5/8-11 x 1.25	H8Z 063 0125 11	2
7	7SLot	FE107	2
8	SlideBar 24	FE124	1
9	24 Cutting Edge	SBC24FE	1
10	Hex Bolt GR5 5/16-18 x 1	92865A583	5

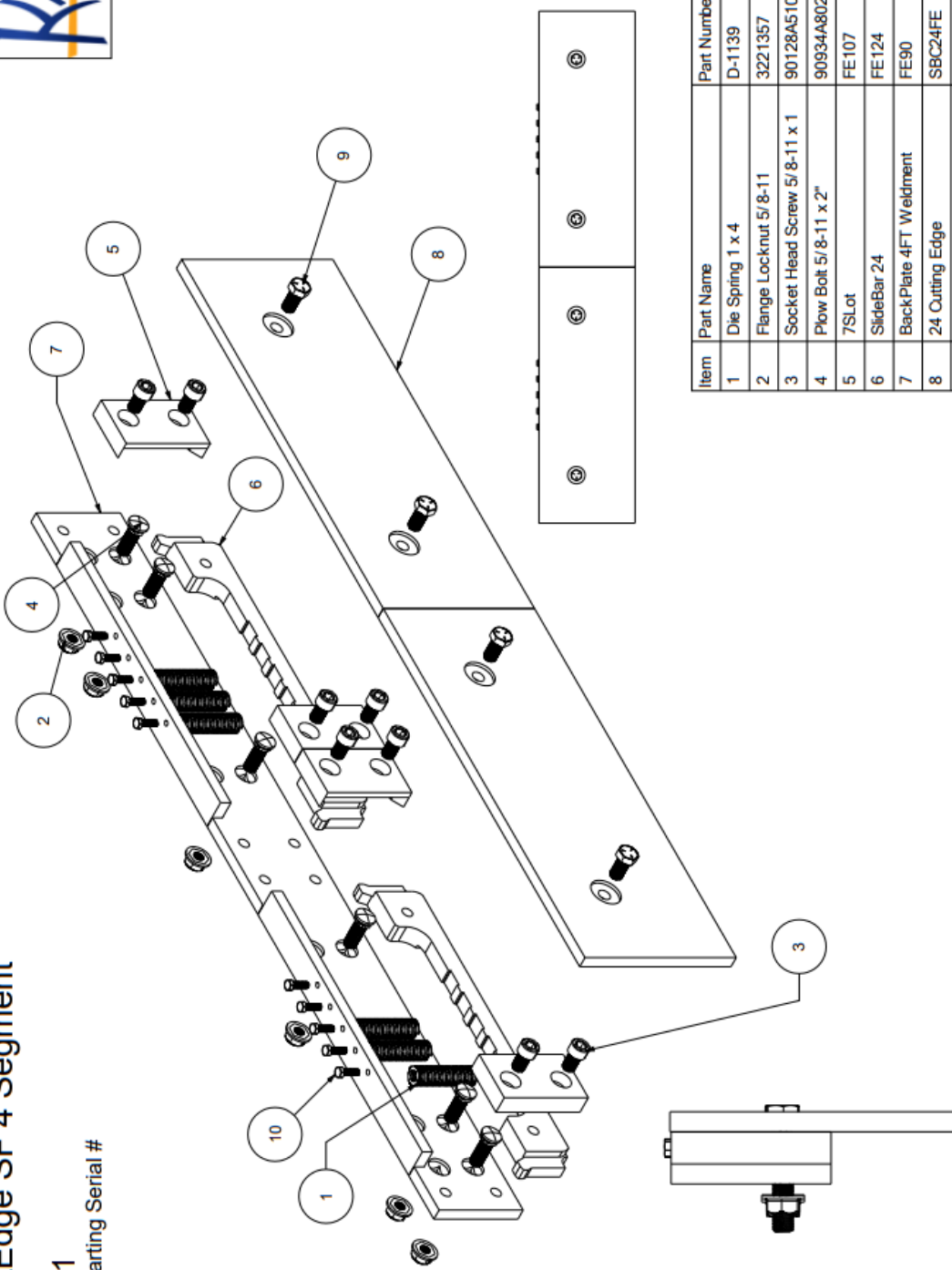


AdvantEdge SF 3 Segment
SF3S
 Version# 1
 Version Starting Serial #



Item	Part Name	Part Number	Quantity
1	Die Spring 1 x 4	D-1139	6
2	Flange Locknut 5/8-11	3221357	5
3	Socket Head Screw 5/8-11 x 1	90128A510	8
4	Plow Bolt 5/8-11 x 2"	90934A802	5
5	18 Cutting Edge	SBC18FE	2
6	7SLOT	FE107	4
7	SlideBar 18	FE118	2
8	BackPlate 3FT Weldment	FE80	1
9	Hex Bolt GR8 5/8-11 x 1.25	H8Z 063 0125 11	4
10	Hex Bolt GR5 5/16-18 x 1	92865A583	10






Item	Part Name	Part Number	Quantity
1	Die Spring 1 x 4	D-1139	6
2	Flange Locknut 5/8-11	3221357	6
3	Socket Head Screw 5/8-11 x 1	90128A510	8
4	Plow Bolt 5/8-11 x 2"	90934A802	6
5	7Slot	FE107	4
6	SlideBar 24	FE124	2
7	BackPlate 4FT Weldment	FE90	1
8	24 Cutting Edge	SBC24FE	2
9	Hex Bolt GR8 5/8-11 x 1.25	H8Z 063 0125 11	4
10	Hex Bolt GR5 5/16-18 x 1	92865A583	10

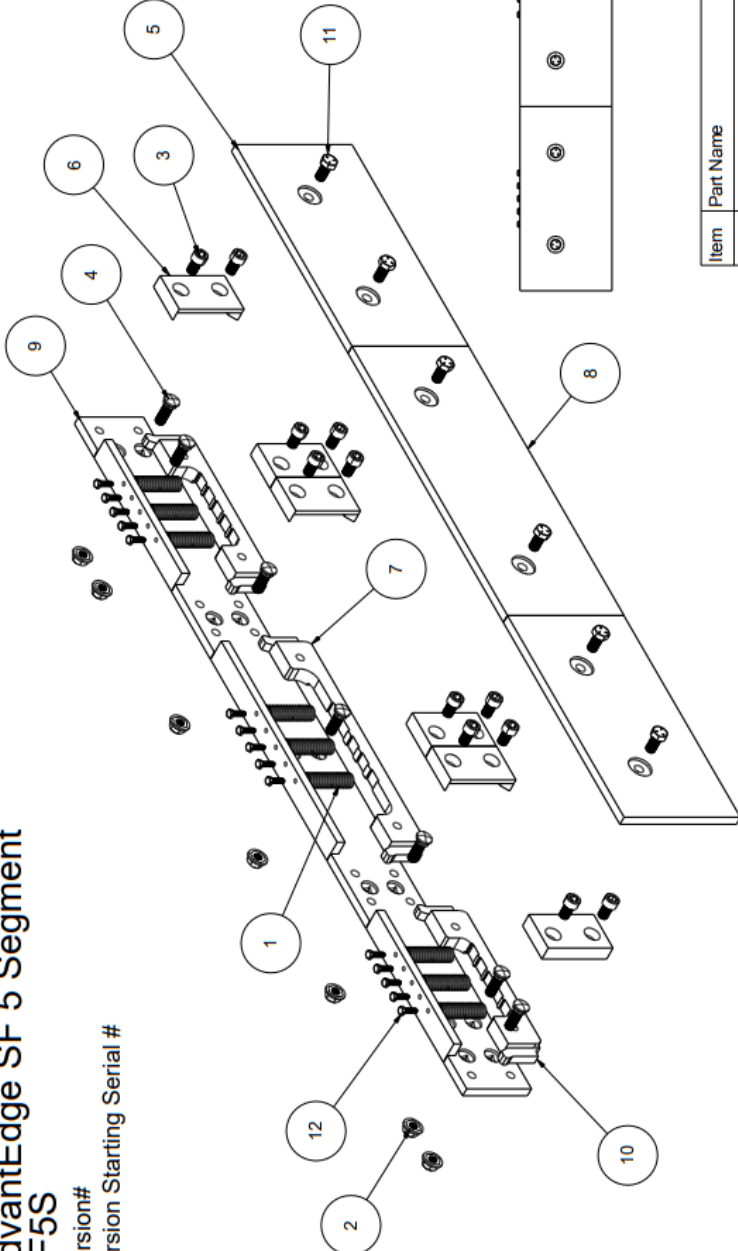
AdvantEdge SF 4 Segment
 Version# 1
 Version Starting Serial #

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Page 9

AdvantEdge SF 5 Segment
 Version#
 Version Starting Serial #



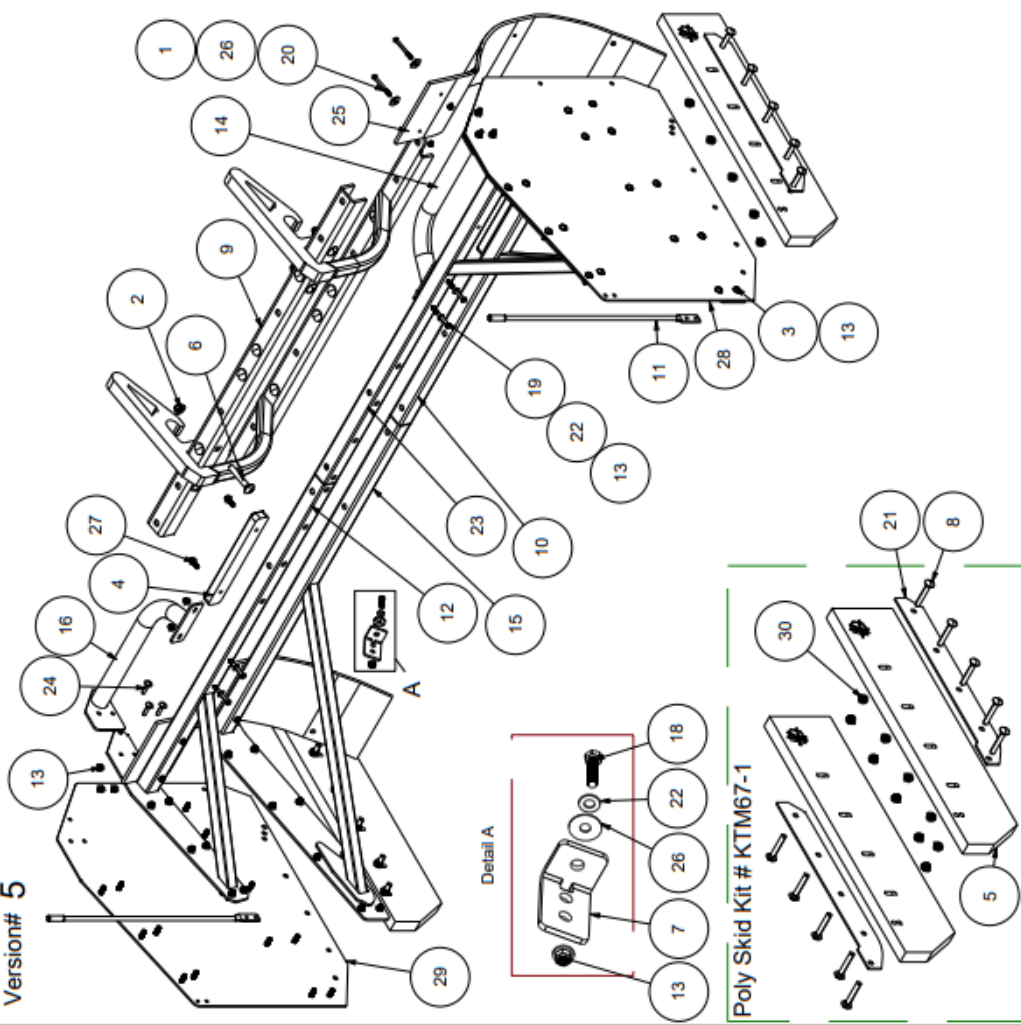
Item	Part Name	Part Number	Quantity
1	Die Spring 1 x 4	D-1139	9
2	Flange Locknut 5/8-11	3221357	7
3	Socket Head Screw 5/8-11 x 1	90128A510	12
4	Plow Bolt 5/8-11 x 2"	90934A802	7
5	18 Cutting Edge	SBC18FE	2
6	7SLot	FE107	6
7	SlideBar 24	FE124	1
8	24 Cutting Edge	SBC24FE	1
9	BackPlate 5FT Weldment	FE100	1
10	SlideBar 18	FE118	2
11	Hex Bolt GR8 5/8-11 x 1.25	H8Z 063 0125 11	6
12	Hex Bolt GR5 5/16-18 x 1	92865A583	15

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Use this break down when ordering parts if your Kage's serial # is lower than; SK2011 124-10999

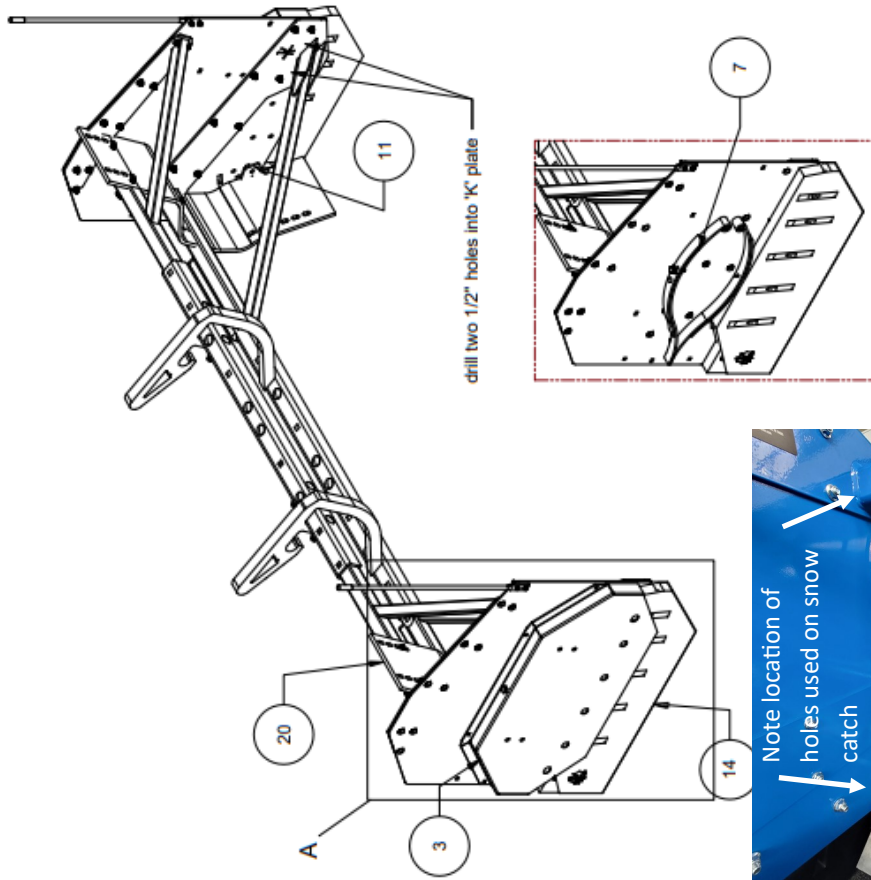
SF2011 Tractor SnowKage Assembly Complete SK2011-{Nominal Size Inches} Version# 5




Item	Part Name	Part Number	Qty
1	Flange Locknut 5/16-18	92018A320	6
2	Flange Locknut 5/8-11	3221357	12
3	Carriage Bolt GR5, 3/8 - 16 * 1	ROC-2131-624	32
4	Isolator	N24-2	2
5	Poly Skid	N36-2	2
6	Carriage Bolt, 5/8-11 x 3.5"	90185A822	12
7	Snow Catch Angle	223-2R	2
8	Carriage Bolt GR5 1/2-13 x 3	ROC-2131-724	10
9	Center Group	100-504	1
10	BDS Weldment	BDS-1	1
11	Plow Guide	W-1578	2
12	TPS Weldment	TPS-1	1
13	Flange Locknut, 3/8 - 16	93298A130	44
14	Tractor Tube, Driver	567-Driver	1
15	BPS Weldment	BPS-1	1
16	Tractor Tube, Passenger	567-Passenger	1
17	Name Plate	KAGE001-11399-2	1
18	Hex Bolt GR5 3/8-16 x 1.5	92865A628	2
19	Hex Bolt GR5 3/8-16 x 3	91257A636	4
20	Hex Bolt, 5/16 - 18 x 3	91247A595	6
21	Poly Support	022-2	2
22	Flat Washer, 3.8	ROC-8071-031	6
23	TDS Weldment	TDS-1	1
24	Carriage Bolt GR5 3/8-16 x 1.25	ROC-2131-626	6
25	Snow Catch	N42-2	2
26	Fender Washer, 3/8	91090A121	8
27	Flange Hex Bolt, 3/8 - 16 x 1	92979A344	4
28	Side Panel Driver	363-2-D	1
29	Side Panel Passenger	363-2-P	1
30	Flange Locknut 1/2 - 13	RF12130FZ	10

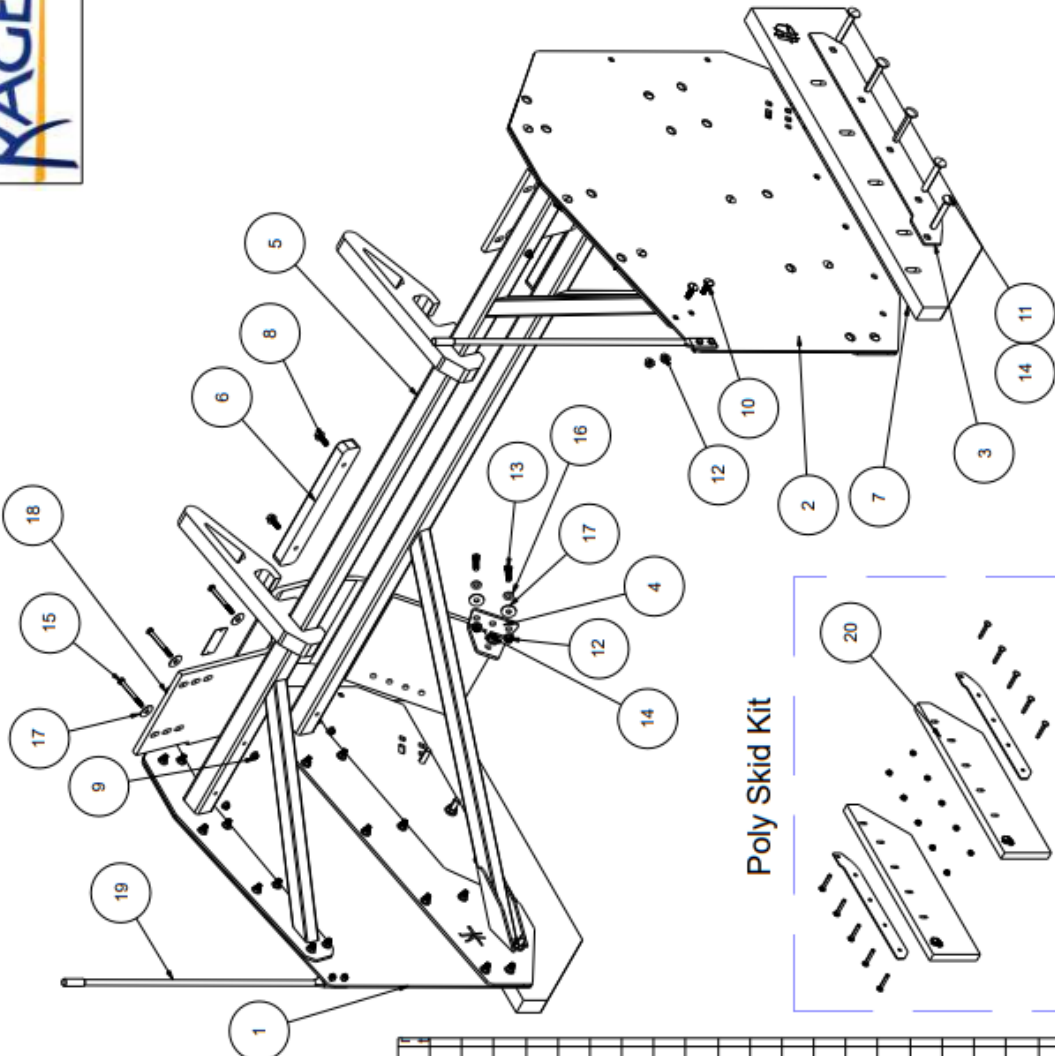
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Item	Part Name	Part Number	Quantity
1	Hex Bolt GR5 1/2 - 13 x 1.75	92865A718	2
2	Flange Hex Bolt 3/8 - 16 x 1	92979A344	4
3	Floating Skid Cover		2
4	Pusher Skid	6912587	2
5	Flange Locknut 5/16-18	92018A320	6
6	Flange Locknut 5/8-11	3221357	12
7	Leaf Spring	123456789121	2
8	Carriage Bolt GR5, 3/8 - 16 x 1	ROC-2131-624	38
9	Isolator	N24-2	2
10	Carriage Bolt 5/8-11 x 3.5"	90185A822	12
11	Snow Catch Angle	223-2R	1
12	Weld Nut 1/2-13	93975A400	2
13	Center Group	100-504	1
14	Poly Skid T	N80-2	1
15	BDS Weldment	BDS-1	1
16	Plow Guide	W-1578	2
17	TPS Weldment	TPS-1	1
18	Flange Locknut, 3 . 8 -16	93298A130	42
19	BPS Weldment	BPS-1	1
20	Snow Catch AdvantEdge	N42-2AE	2
21	Slide Panel Driver	363-2-D	1
22	Snow Catch Angle AdvantEdge	223-2RAE	1
23	Hex Bolt GR5 3/8-16 x 1.5	92865A628	4
24	SF Snowkage Name Plate	KAGE001-SK20	1
25	Hex Bolt, 5/16 - 18 x 3	91247A595	6
26	Flat Washer 3/8	ROC-8071-031	4
27	XTreme Skid Bushing		5
28	TDS Weldment	TDS-1	1
29	Fender Washer, 3/8	91090A121	10
30	Slide Panel Passenger	363-2-P	1



	Standard Tolerances .0 = +/- .0625" .00 = +/- .01" .000 = +/- .003"		Finish Process NONE	Coating Detail WEIGHT 467.7	SHEET SIZE A
	PART NAME SnowKage Assembly Complete 8, 9, and 10 PART NUMBER SK2011-96;SK2011-108;SK2011-120 MATERIAL NOMINAL SIZE	SCALE 1:1	DATE	SHEET 1 OF 1	
REV 2017:2017:2017	DESCRIPTION	DATE APPROVED			





WEIGHT LBS 359.20

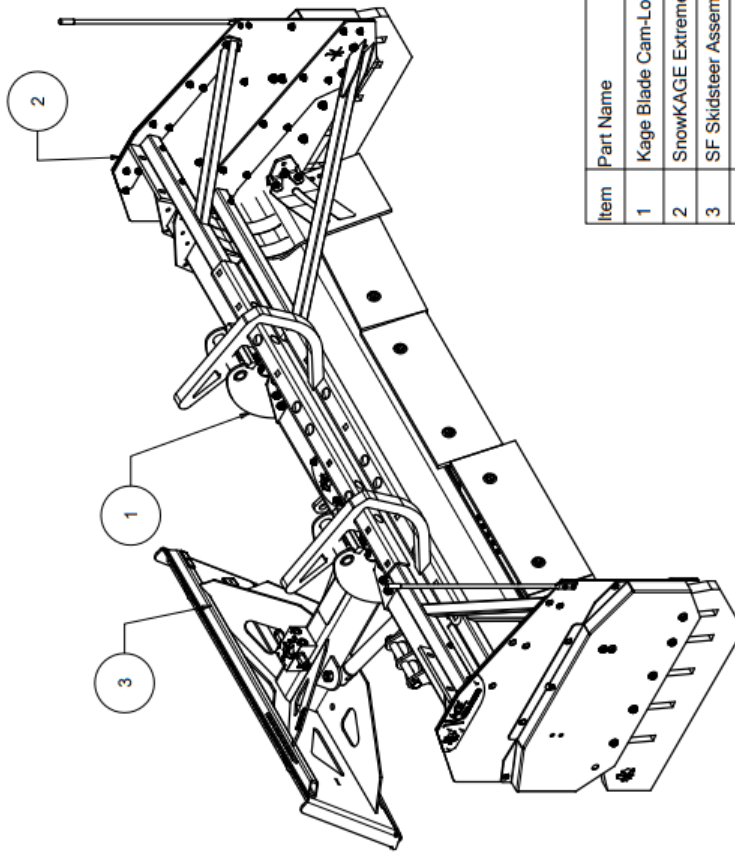
SnowKage Assembly Complete 6
SK72
 Version# 2017
 Version Starting Serial #

Item	Part Name	Part Number	Quantity
1	Side Panel Passenger	363-2-P	1
2	Side Panel Driver	363-2-D	1
3	Poly Support	022-2	2
4	Snow Catch Angle	223-2R	2
5	SnowKage Frame 72	SKFRAME72	1
6	Isolator	N24-2	2
7	Poly Skid T	N80-2	2
8	Flange Hex Bolt 3/8 - 16 x 1	92979A344	4
9	Flange Locknut 5/16-18	92018A320	6
10	Carriage Bolt GR5, 3/8 - 16 x 1	ROC-2131-624	38
11	Carriage Bolt GR5 1/2-13 x 3	ROC-2131-724	10
12	Flange Locknut, 3/8 - 16	93298A130	42
13	Hex Bolt GR5 3/8-16 x 1.5	92865A628	4
14	Flange Locknut 1/2 - 13	RF1213OFZ	10
15	Hex Bolt, 5/16 - 18 x 3	91247A595	6
16	Flat Washer, 3/8	ROC-8071-031	4
17	Fender Washer, 3/8	91090A121	10
18	Snow Catch	N42-2	2
19	Plow Guide	W-1578	1
20	Poly Skid Kit (New Style)	KTM85-1	0

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SnowFire XTreme System 8, 9, 10, 12 Foot. SBK & LBK pivot frame options



Item	Part Name	Part Number	QTY
1	Kage Blade Cam-Lock Bracket Kit	KTKBB-2	1
2	SnowKAGE Xtreme 2024	SK2011-(Nominal Size Inches)	1
3	SF Skidsteer Assembly W/ AdvantEdge 8	SB96	
4	SF Skidsteer Assembly W/ AdvantEdge 9	SB108	
5	SF Skidsteer Assembly W/ AdvantEdge 10	SB120	
6	SF Skidsteer Assembly W/ AdvantEdge 12	SB144	
7	LB Compact Loader Assembly W/ AdvantEdge 9	LB108	
8	LB Compact Loader Assembly W/ AdvantEdge 10	LB120	
9	LB Compact Loader Assembly W/ AdvantEdge 12	LB144	

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Item	Part Name	Part Number	QTY
2	SnowKage Assembly Complete 6	SK2011-72	2
3	SnowKage Assembly Complete 8	SK2011-96	2
4	SnowKage Assembly Complete 9	SK2011-108	2
5	SnowKage Assembly Complete 10	SK2011-120	2
6	PIN GROUP	44	2
7	JIC x ORB Elbow Adapter	6801-NWO-06-06	2
8	JIC - Oring 04x06	6400-0-04-06	4
9	Flange Hex Bolt 3/8 - 16 x 1	92979A344	4
10	JIC Bulkhead 04x04	2700-04-04	4
11	Hex Bolt GR5 3/4-10 x 2.25	92865A844	2
12	Hydro Line 16.5 06x06	HY-748	2
13	Flange Hex Bolt 3/8 - 16 - 1.25	92979A348	24
14	Tractor Blade 6 Foot	TB72	2
15	Tractor Blade 8 Foot	TB96	2
16	Tractor Blade 9 Foot	TB108	2
17	Tractor Blade 10 Foot	TB120	2
19	Line, Blade to Hydro Clamp	1-871	4
20	JIC 90 Elbow 04X04	6500-04-04	4
21	Distribution Block	C11275	1
22	Bulkhead Nut GR5 7, 16-20	94846A520	4
23	CYLINDER BRACKET	40	2
24	Flange Locknut, 3 8 - 16	93298A130	16
25	JIC - Oring 06x06	6400-0-06-06	5
26	Hex Bolt GR8 3/4-10 x 3.25"	91257A848	2
27	JIC 90 Elbow 06 x Union 06	2701-LN-06-06	2
28	Line Cap	11-201	2
29	Hydro Lock Cylinder	BM-0413	2
30	GR5 Hex Nut Thin Nylock 3/4-10	91342A230	4
31	Clamp Group	387	2
32	Line Valve to Dist. Block	1-765	2
33	Line Dist Block to Bulkhead LG	1-670	4
34	TRACTOR BRACKET	094-2	2
35	Male Ag Coupler	19-400	2
36	Tractor Tube, Driver	567-DRIVER	1
37	Tractor Tube, Passenger	567-PASSENGER	1
38	Hex Bolt GR5 3/8-16 x 3	91257A636	4
39	Flat Washer 3/8	ROC-8071-031	4
40	Carriage Bolt GR5 3/8-16 x 1.25	ROC-2131-626	6

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Operator Instructions

To release the SnowKage raise boom approximately 5', tilt plow down until Kage box unit swings freely (must tilt approximately 50 – 60 degrees). Gently set Kage box down using the *vertical* motion of the boom, (rather than the curling motion of the attachment plate).

To attach the SnowKage, raise boom approximately 5', tilt plow down until the Snow Kage plow hooks become visible. Align, and position plow brackets underneath mating hooks of the SnowKage. Using *vertical* motion of boom, pick up the SnowKage, *then* curl the plow back into normal position.

Rubber/Poly Wear Edges only need to be replaced or adjusted when cutting edge of plow is replaced/adjusted. Replacement wearable parts can be purchased by calling Kage Innovation at 844 314 5243.

Down Pressure on plow is still possible. However, operator must not lift front wheels of machine off the pavement excessively (when the SnowKage is attached to the plow), as this could result in unwanted leakage of snow from edges of plow

Rough terrain should be avoided at high speeds (when the SnowKage is attached to the plow), as this can cause excessive bounce, simulating 'release tilt' necessary to release the SnowKage.



SnowKage Cam-Lock Bracket Installation Instructions **For BOSS® and Falls® Plows**

1. Attach snow plow to skid steer. Position the moldboard straight.
2. Position Cam-Lock brackets on the back radius of the moldboard, pushed up against the top front most support channel of the plow (Fig. A). The center of the Cam-Lock bracket should be 16.5" away from the centerline of the plow moldboard (Fig B). Hold them in place using a C clamp, vise grip, or the likes.
3. Mark the center of the holes in the Cam-Lock bracket on the moldboard of the plow using a 3/8" drill bit or center punch.
4. Drill pilot holes in the moldboard using a 3/16" drill bit. Finish holes with a 3/8" drill bit. Paint or silicone holes in moldboard to prevent rust.
5. Bolt Cam-Lock brackets firmly into place using the gr 5 1½" x 3/8 bolts, with the bolt head and large washer on the front side of the moldboard.

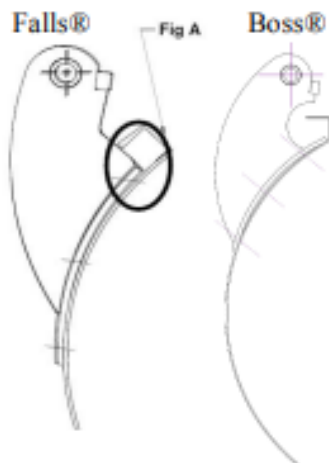
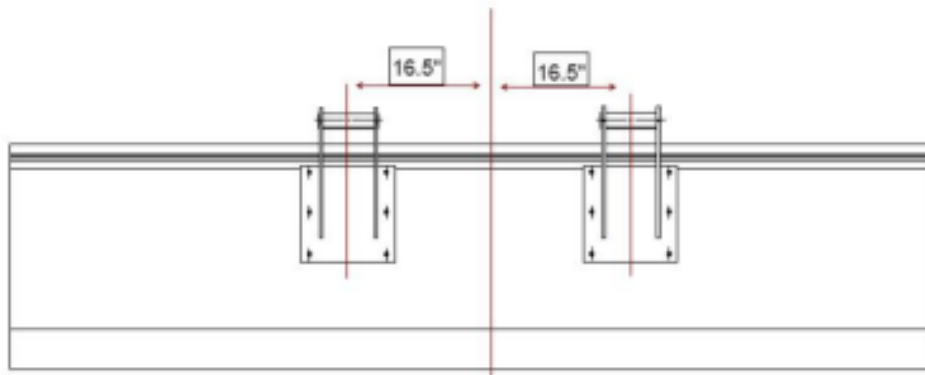


Fig B



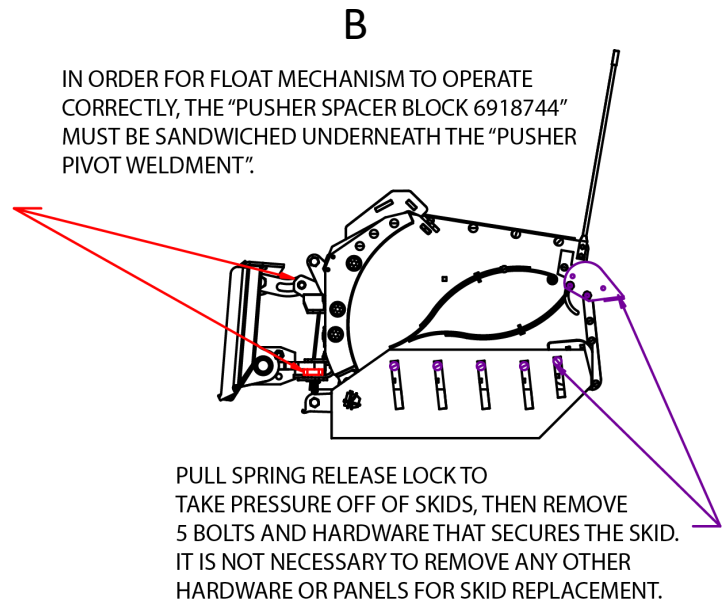
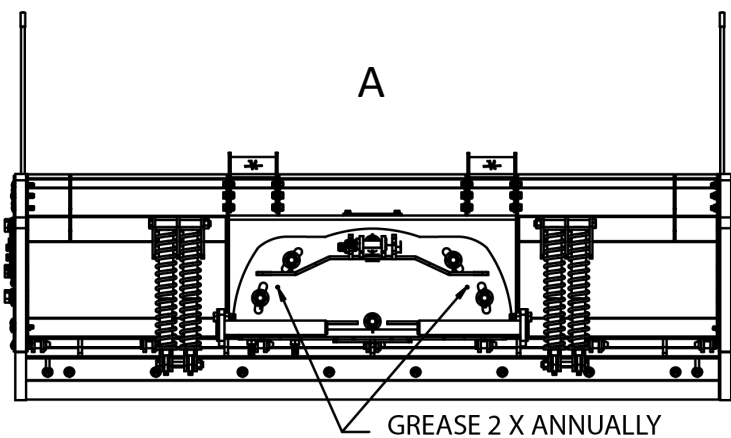
INTRODUCTION

Congratulations on your new SnowFire Blast™ Pusher! Be sure to save this for future parts lookup, and note the other maintenance instructions contained in this owners' manual!

The entire Team at KAGE Innovation is thankful to you for your purchase, and support of our brand! Make sure to let us know how we are doing, and if there is anything that we can do better! We love to serve the snow removal and landscape professionals!

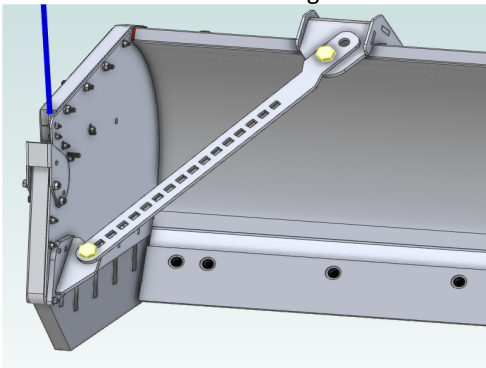
MAINTENANCE

1. There are two grease points located on the slot plate. Grease these 2 x per season. See diagram A.
2. Check and replace your cutting edges on the moldboard as needed. Depending on the plowing surface, speed, and use, this will happen 1—4 times per season. The OEM cutting edges are 6" Tall x 5/8" thick high carbon steel. They use a "standard highway punch" bolt pattern.
3. Check and replace your skids P/N 6912587. Typically these will be replaced as often as the cutting edge(s). See diagram B for easy replacement.

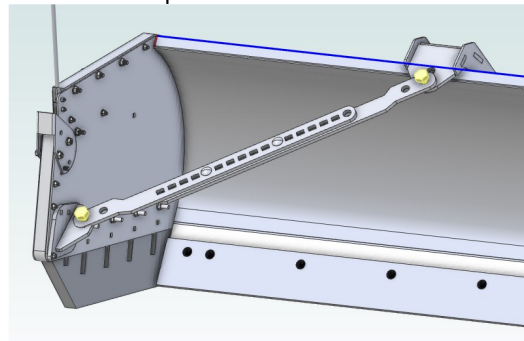


INITIAL SETUP STIFFENER ARM CONFIGURATIONS

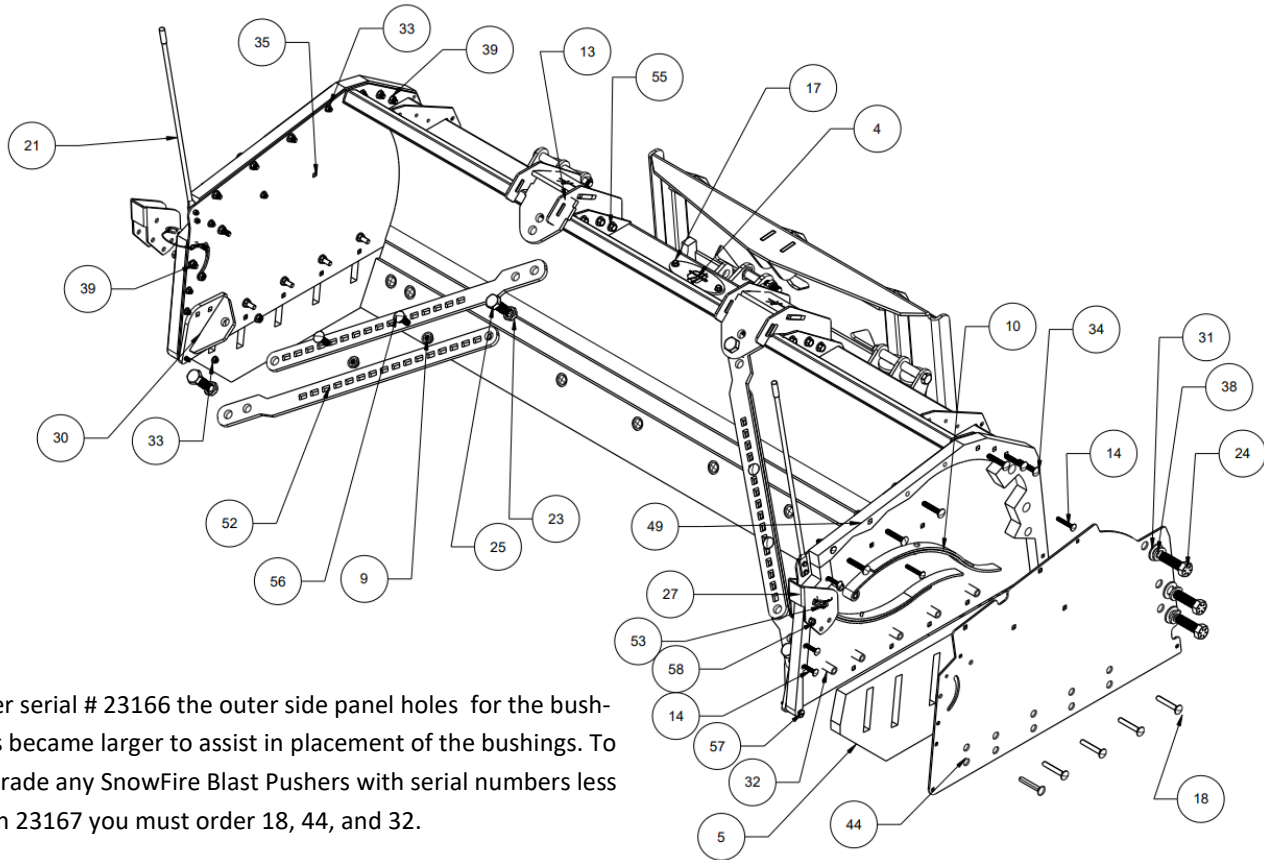
6' Arm Stiffener Use—Single



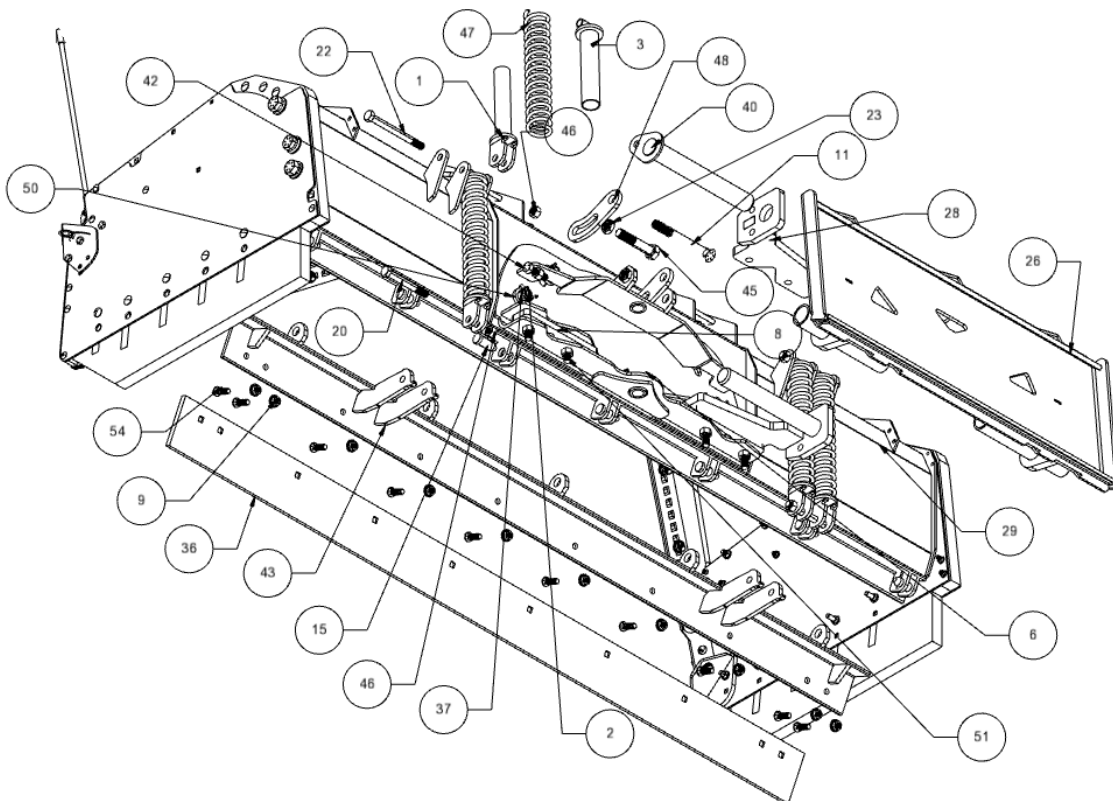
8-12' Example Arm Stiffener Use—Double



Parts Breakdown for 6, 8, 9, and 10' Models



After serial # 23166 the outer side panel holes for the bushings became larger to assist in placement of the bushings. To upgrade any SnowFire Blast Pushers with serial numbers less than 23167 you must order 18, 44, and 32.

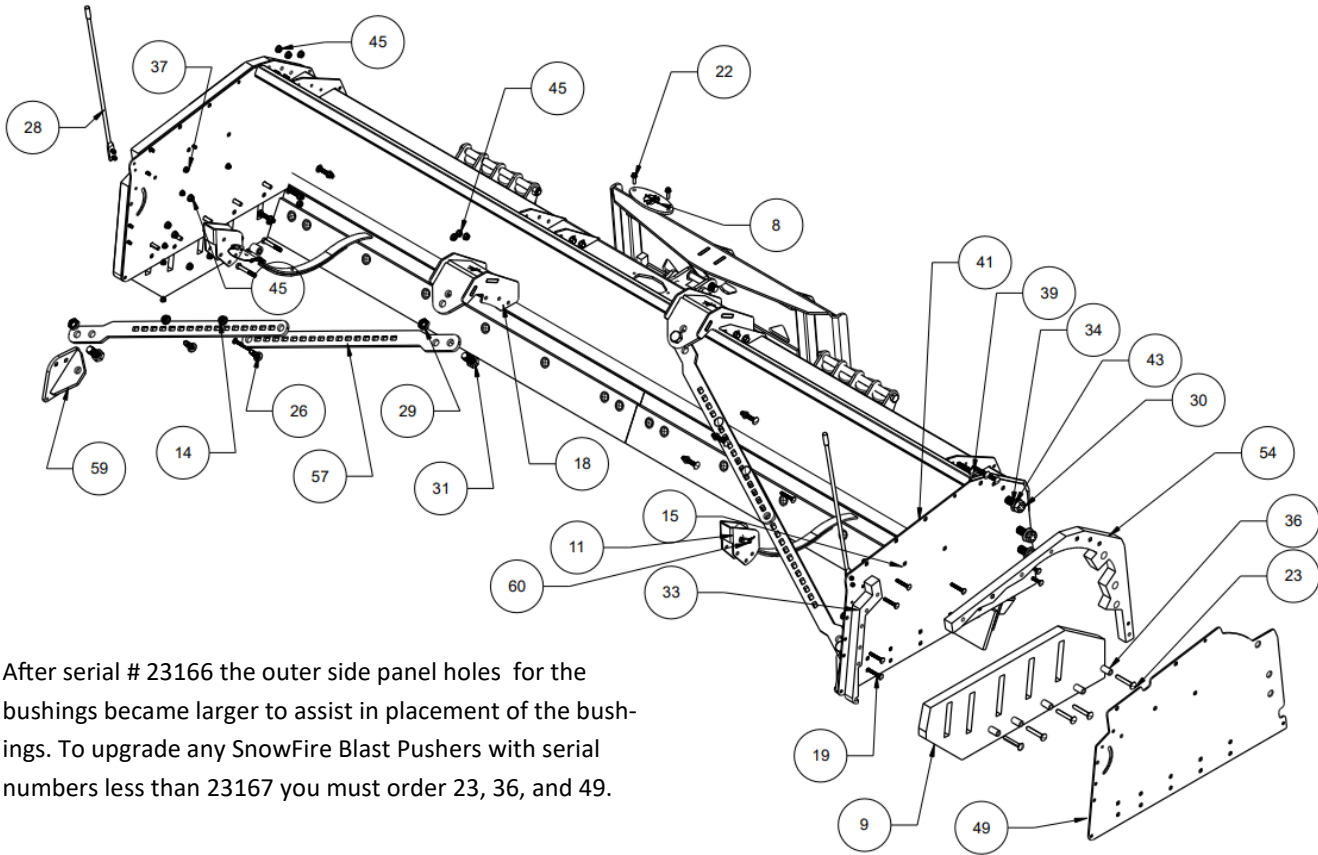


Parts Breakdown for 6, 8, 9, and 10' Models

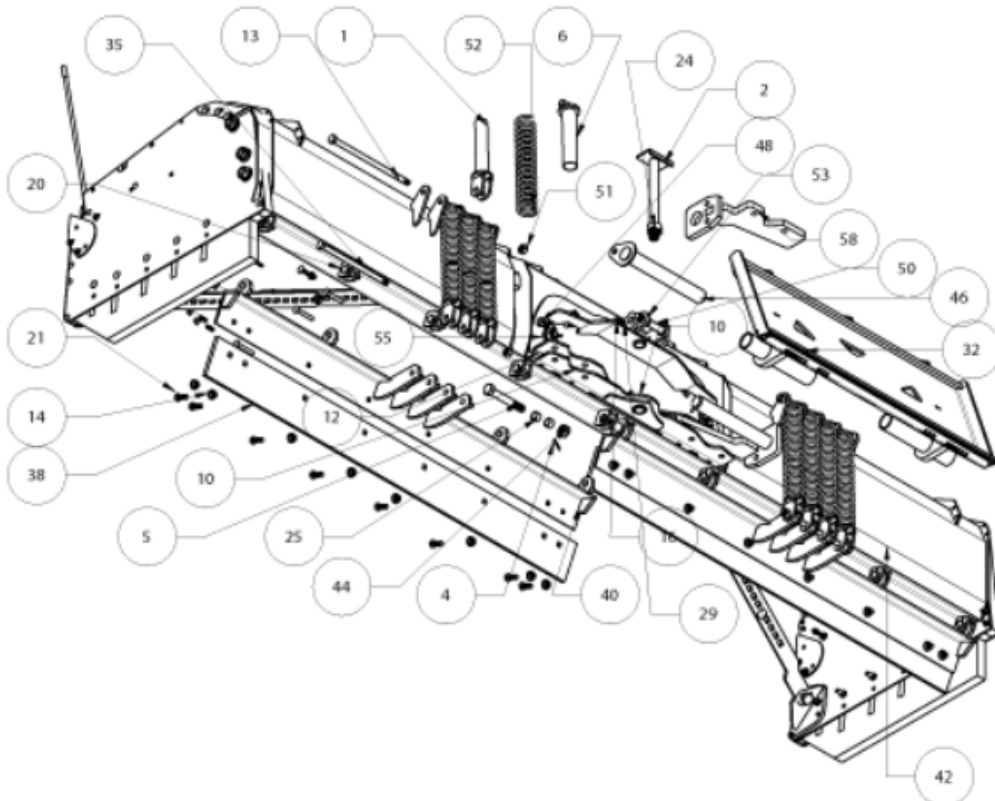
Item	Part Name	Part Number	Quantity
1	Spring Bottom L	SP800	4
2	Cotter Pin 3/16 x 2	98338A516	13
3	Spring Top L	SP900	4
4	Hole Cap	404-1	1
5	Pusher Skid	6912587	2
6	SLOT PLATE	153	1
7	Leaf Spring Lock	6914889	2
8	Pusher Spacer Block	6918744	2
9	Flange Locknut 5/8-11	3221357	14
10	Leaf Spring	123456789121	4
11	Hex Bolt GR8 1-8 x 8	91257A977	1
13	Pusher Brace Bracket	6914899	2
14	Carriage Bolt 3_8-16 x 2.5	90185A634	14
15	Clevis Pin	98306A677	7
17	Flange Hex Bolt 3/8 - 16 - 1.25	92979A348	2
18	Carriage Bolt GR5 1/2-13 x 3	ROC2131-724	10
20	Hex Bolt GR5 3/4-10 x 6	91247A859	2
21	Plow Guide	W-1578	2
22	Hex Bolt GR5 3/4-10 x 8	91247A863	2
23	1-8 Thin Hex Nylock Nut G5	91342A260	6
24	Hex Bolt GR8 1-8 x 3.25	92620A959	6
25	HEX BOLT GR8 1-8 x 2.25	92620A954	4
26	Floating Skidsteer Attachment Plate	28-600	1
27	Pusher Frame Front	6902365	2
28	Pusher Pivot Weldment	6914993	2
29	MOLDBOARD WELDMENT 8	SBM-8	1
30	Universal Brace Weldment	691895	2
31	SAE Flat Washer 1 x 2	90126A038	6
32	Skid Bushing	B-812515	10
33	Flange Locknut, 3_8 -16	93298A130	16
34	Carriage bolt 1/2 - 13 x 2.5	90185A722	12
35	Snow Pusher Side Panel Inner	6919888	2
36	Cutting edge 6ft, 8ft, or 9ft	SBC72, SBC96, SBC108	1

Item	Part Name	Part Number	Quantity
136	Cutting edge 10ft	SBC60	2
37	Slotted Nut 1-8	97190A040-K8	6
38	Lockwasher 1"	91102A038	6
39	Flange Locknut 1/2 - 13	RF12130FZ	41
40	Float Pin	67-001	2
42	Hex Bolt G5 3/4-10 x 2.5	92865A845	2
43	Base Angle SF 6, 8, 9, 10	2146, 2148, 2149, 214-10	1
44	Snow Pusher Side Frame Panel Outer	6913332	2
45	Hex Bolt GR8 1-8 x 6.5	91257A970	1
46	Centerlocknut GR2 3/4-10	90040A147-K5	10
47	Spring 17	SP21	4
48	Slide Arc	3908555	2
49	Pusher Frame back	9612875	2
50	1-.375 washer	13W	6
51	Hex Bolt GR8 3/4-10 x 4"	91257A851	4
52	Slit Arm Plate	6912563	4
53	98412A505_Loop-Grip Clevis Pin with Hairpin Cotter Pin	98412A505	2
54	Plow Bolt 5/8-11 x 2"	90934A802	10
55	Flange Hex Bolt Grade 5 1/2 - 13 x 1.25	92979A467	12
56	Carriage Bolt 5/8-11 x 2	90185A810	4
57	Carriage Bolt 3_8-16 x 3	90185A127	2
58	Hex Bolt 1_2-13 x 3.25	91247A725	6

Parts Breakdown for 12' Models



After serial # 23166 the outer side panel holes for the bushings became larger to assist in placement of the bushings. To upgrade any SnowFire Blast Pushers with serial numbers less than 23167 you must order 23, 36, and 49.



Parts Breakdown for 12' Models

Item	Part Name	Part Number	QTY	Item	Part Name	Part Number	QTY
1	Spring Bottom L	SP800	8	31	HEX BOLT GR8 1-8 x 2.25	92620A954	4
2	KING PIN	189-1	1	32	Floating Skidsteer Attachment Plate	28-600	1
4	Cotter Pin 3/16 x 2	98338A516	15	33	Pusher Frame Front	6902365	2
5	Hex Bolt GR8 1-8 x 6.5 w Hole	91257A970-K5	1	34	SAE Flat Washer 1 x 2	90126A038	6
6	Spring Top L	SP900	8	35	Hex Bolt Grade2 .75-10 x 13	H22_075_1300_1	2
8	Hole Cap	404-1	1	36	Skid Bushing (superceded)	B-812515	10
9	Pusher Skid	6912587	2	36 REV 2	Skid Bushing	B-812515 REV2	10
10	SLOT PLATE	153	1	37	Flange Locknut, 3_8 -16	93298A130	15
11	Leaf Spring Lock	6914889	2	38	Cutting Edge 6ft	SBC72	2
12	Pusher Spacer Block	6918744	3	39	Carriage bolt 1/2 - 13 x 2.5	90185A722	12
13	Hex Bolt Grade2 .75-10 x 15	H22_075_1500_1	2	40	12 SF Base Angle 6	214-12	2
14	Flange Locknut 5/8-11	3221357	20	41	Snow Pusher Side Panel Inner	6919888	2
15	Leaf Spring	123456789121	3	42	MOLDBOARD WELDMENT 12	SBM-12	1
16	Hex Bolt GR8 1-8 x 8	91257A977	1	43	Lockwasher 1"	91102A038	6
17	Flange Hex Bolt 1/2 - 13 x 1	92979A463	12	44	Slotted Nut 1-8	97190A040-K8	7
18	Pusher Brace Bracket	6914899	2	45	Flange Locknut 1/2 - 13	RF12130FZ	40
19	Carriage Bolt 3_8-16 x 2.5	90185A634	16	46	Float Pin	67-001	2
20	Clevis Pin	98306A677	8	47	Hex Flange Bolt 1_2-13 x 3 IN	90409A155	9
21	Plow Bolt 5/8-11 x 2"	90934A802	16	48	Hex Bolt Gr5 3/4-10 x 2.5	92865A845	2
22	Flange Hex Bolt 3/8 - 16 - 1.25	92979A348	2	49	Snow Pusher Side Frame Panel Outer (superceded)	6913332	2
23	Carriage Bolt GR5 1/2-13 x 3 (superceded)	ROC-2131-724	10	49 REV 2	Snow Pusher Side Frame Panel Outer	6913332 REV2	2
23	Flange Hex Bolt GR5 1/2 - 13 x 1/2	90409A155	10	50	Hex Bolt GR8 1-8 x 5	91257A965	1
24	Hex Locknut 1.25-7	93470A540	1	51	Centerlocknut GR2 3/4-10	90040A147-K5	6
25	Stop Bushing	909-4	2	52	Spring 17	SP21	8
26	Carriage Bolt 5/8-11 x 2	90185A810	4	53	Slide Arc	3908555	2
28	Plow Guide	W-1578	2	54	Pusher Frame back	9612875	2
29	1-8 Thin Hex Nylock Nut GR5	91342A260	6	55	1-.375 washer	13W	6
30	Hex Bolt Gr8 1-8 x 3.25	92620A959	6	57	Stiff Arm Plate	6912563	4
				58	Pusher Pivot Weldment	6914993	2
				59	Universal Brace Weldment	691895	2
				60	98412A505_Loop-Grip Clevis Pin with Hairpin Cotter Pin	98412A505	2

Snowfire Blast Backdrag Kit
4771567-{SIZEINFEET}
 Version# _____
 Version Starting Serial # _____

Trim Middle Brace for 6, 8, 9, and 10'.
 No trimming needed for 12'.
 Notches indicate cut location for each size.

KAGE®

Relocate plow markers

Install Float Stop between "Slide Arcs" as shown below. This prevents unwanted 'float' when in the backdrag position.

Item	Part Name	Part Number	Quantity
1	Backdrag Bracket Passenger	4517784	1
2	Backdrag Bracket Driver	6345984	1
3	Backdrag Middle Brace	6873956	1
4	Carriage Bolt GR5 1/2-13 x 3	ROC-2131-724	8
5	Carriage Bolt 5/8-11 x 2	90185A810	2
6	Cutting Edge (10', 12')	SBC60, SBC72	2
7	Cutting Edge(6', 8', 9')	SBC72, SBC96, SBC108	1

Item	Part Name	Part Number	Quantity
8	Backdrag Angle (10', 12')	6534093	3
9	Backdrag Angle (6', 8' 9')	6534093	2
10	Flange Locknut 5/8-11 (10', 12')	3221357	26
11	Flange Locknut 5/8-11 (6', 8', 9')	3221357	16
12	Carriage Bolt 5/8-11 x 1.75 (10', 12')	90185A438	24
13	Carriage Bolt 5/8-11 x 1.75 (6', 8' 9')	90185A438	14
14	Float Stop	3908444	1

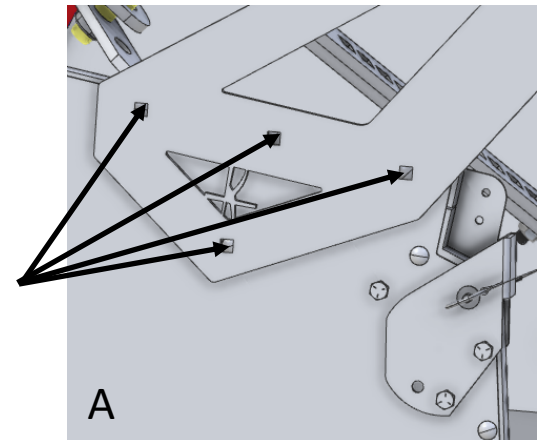
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WEIGHT LBS

Backdrag Kit Installation instructions:

1. If kit is included with the SnowFire Blast:

Loosen the bolts holding the Driver and Passenger brackets enough that the brackets can move. Swing the brackets up to proper position. If the spring release lock is not already released on each side, release them. Install four(4) 5/8-11x3 carriage bolts on each side in the holes shown by the arrows in A. Loosely install nuts on the carriage bolts.

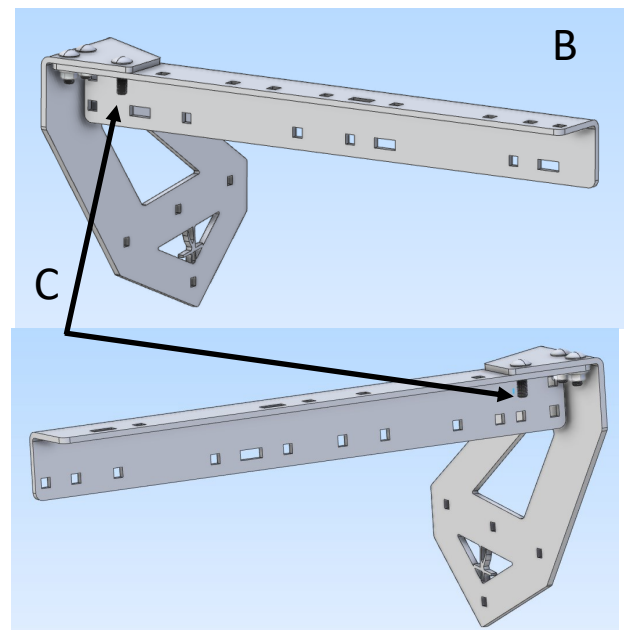


If kit is purchased separately:

Release both spring release locks. Take out the four(4) 5/8-11x3 carriage bolts on each side in the holes shown by the arrows in A. Install the brackets and reinstall the carriage bolts. Loosely install nuts on the carriage bolts.

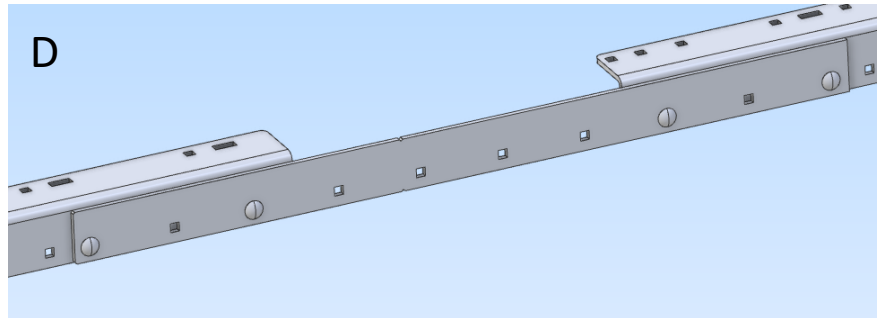
If possible, raise the plow up during step 1 to take tension off of the springs

2. Using two(2) 1/2-13x1.75 carriage bolts and two(2) 1/2-13 locknuts for each side, install the Backdrag Angles as shown in B and C. Tighten the nuts down but leave them loose enough that the angle still has some play. Install 1/2-13x2 carriage bolts in the locations shown by the arrows but do not add nuts.



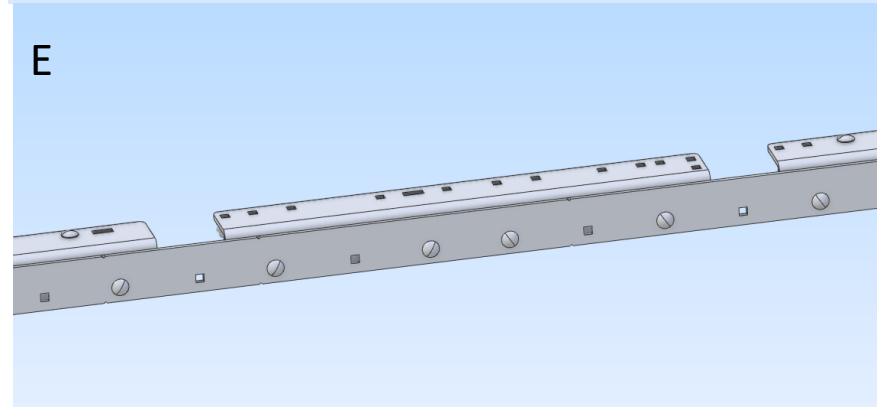
Backdrag Kit Installation instructions:

3. Using four(4) 1/2-13x1.75 carriage bolts 1/2-13 locknuts, install the Backdrag Middle brace as shown in D. Tighten the nuts down, but leave some slack.



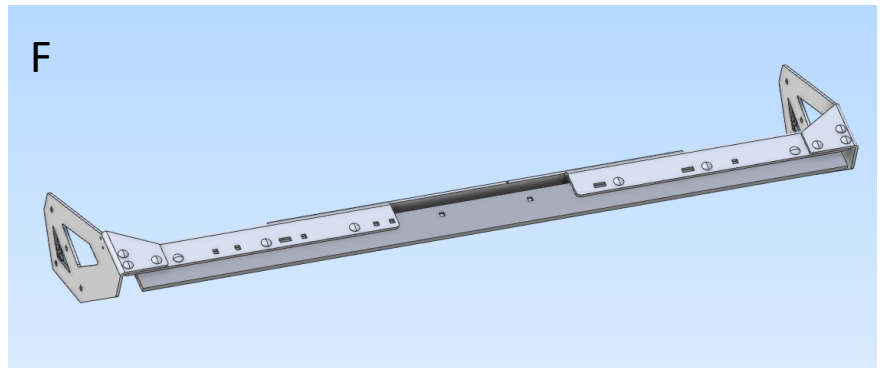
4. (10' AND 12' VERSIONS ONLY)

Using four(4) 1/2-13x1.75 carriage bolts 1/2-13 locknuts, install a third Backdrag Angle as shown in E. Tighten the nuts down, but leave some slack.



5. Install the cutting edge with 1/2-13x1.75 carriage bolts and 1/2-13 locknuts. Be sure to install locknuts on the 1/2-13x2 nuts from step 2.

This step is easier with a second person or forks to hold up the cutting edge.



6. Tighten all nuts and bolts down.

Revision Comments

Date	Name	Description
6/7/2024	Josh	First Revision
6/17/2024	Josh	Added Xtreme breakdown
8/19/2024	Josh	Added SFM54 breakdown
10/12/2024	Josh	Added backdrag install instructions