



21-SERIES

LIFT & PULL-TYPE S-TINE FIELD CULTIVATOR

(Rigid and Folding Models)

PARTS BOOK



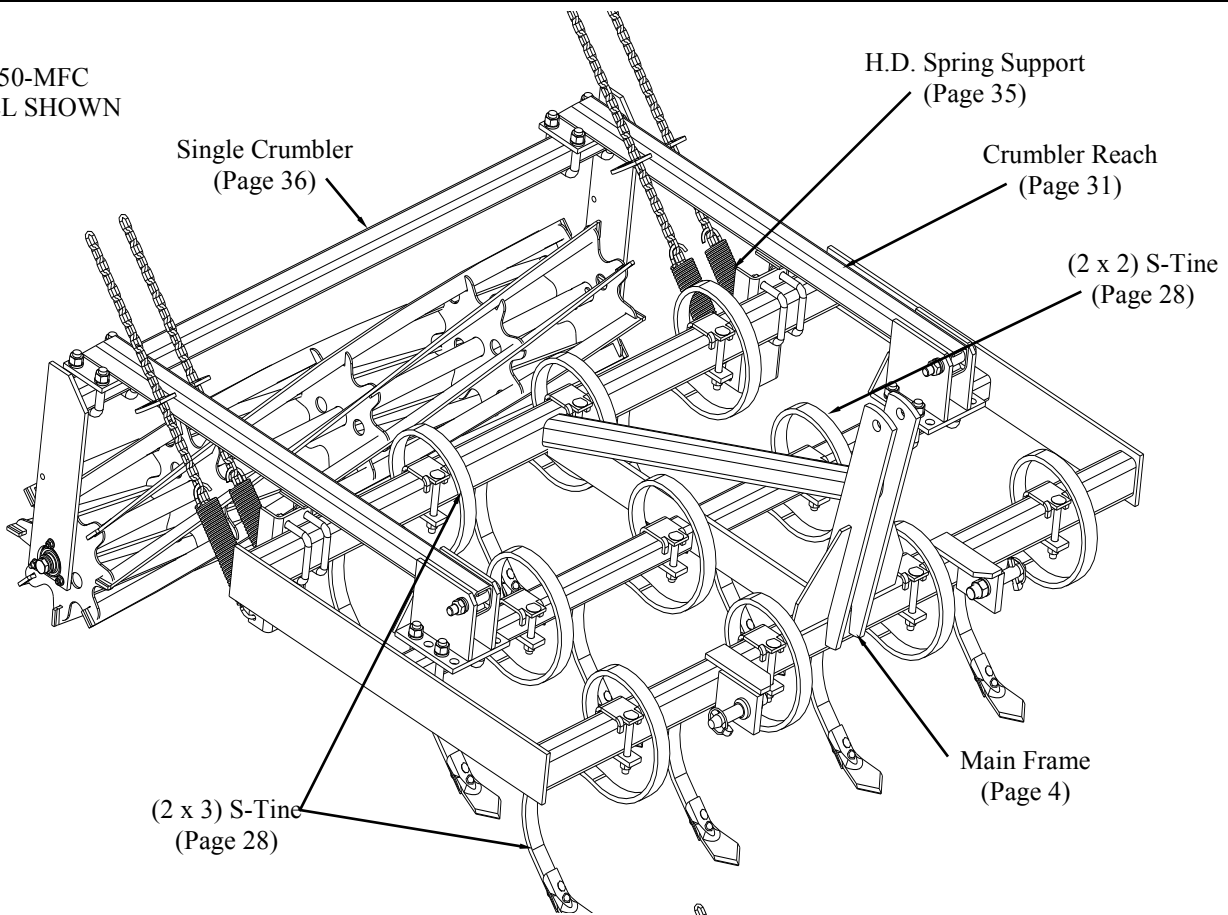
PART NO. 21-PB-01
Printing Date JAN 2015

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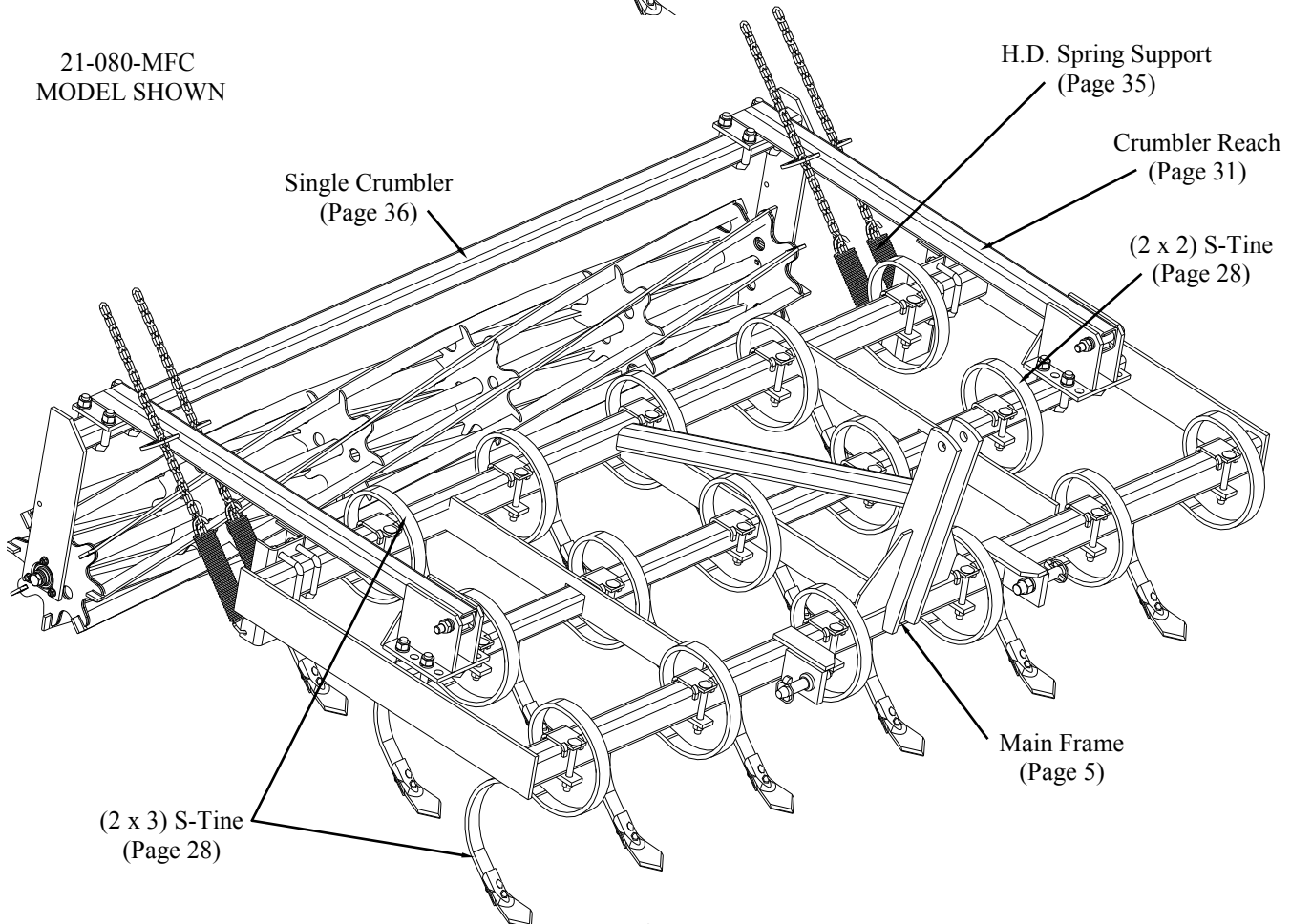
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MINI FIELD CULTIVATORS

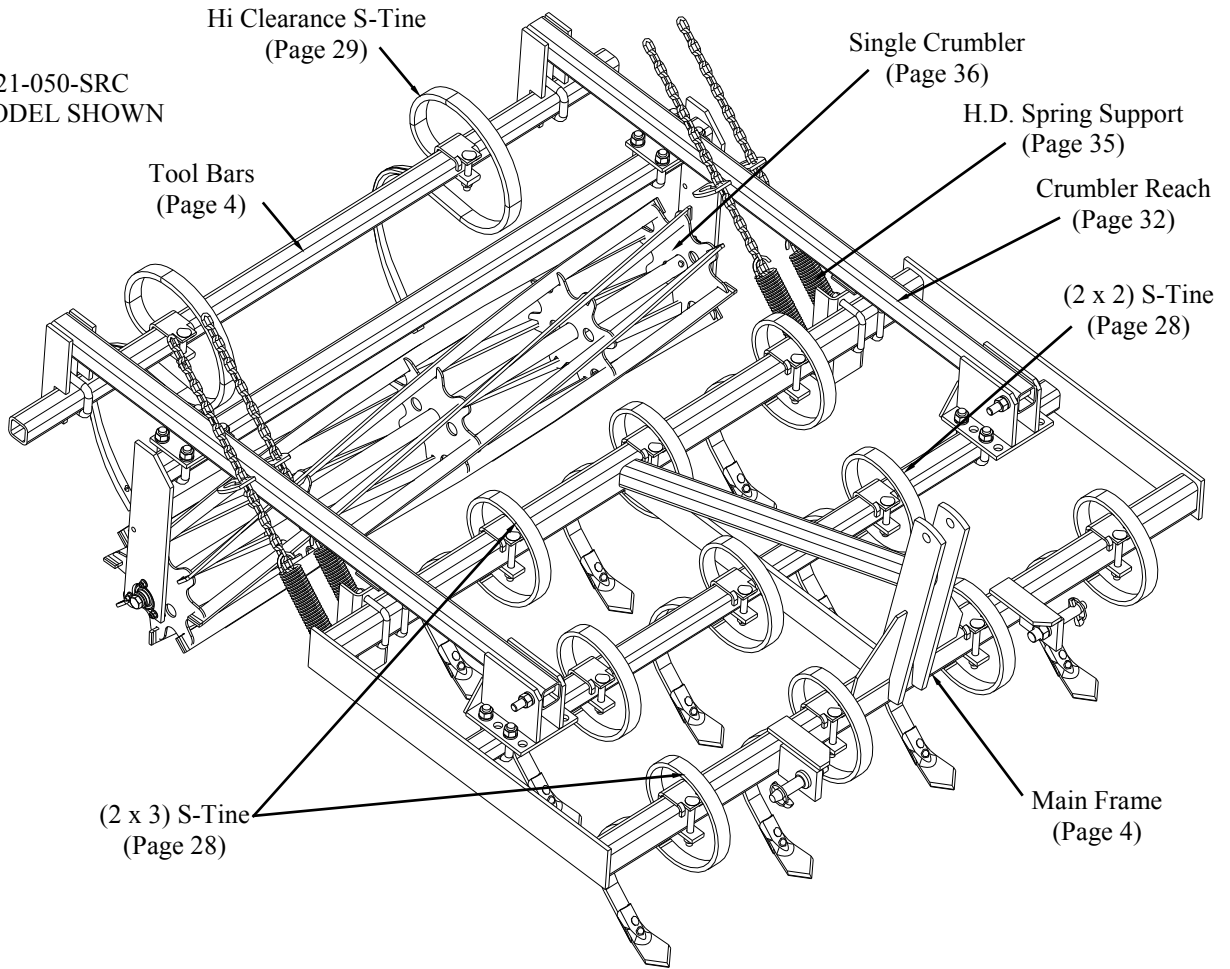
21-050-MFC
MODEL SHOWN



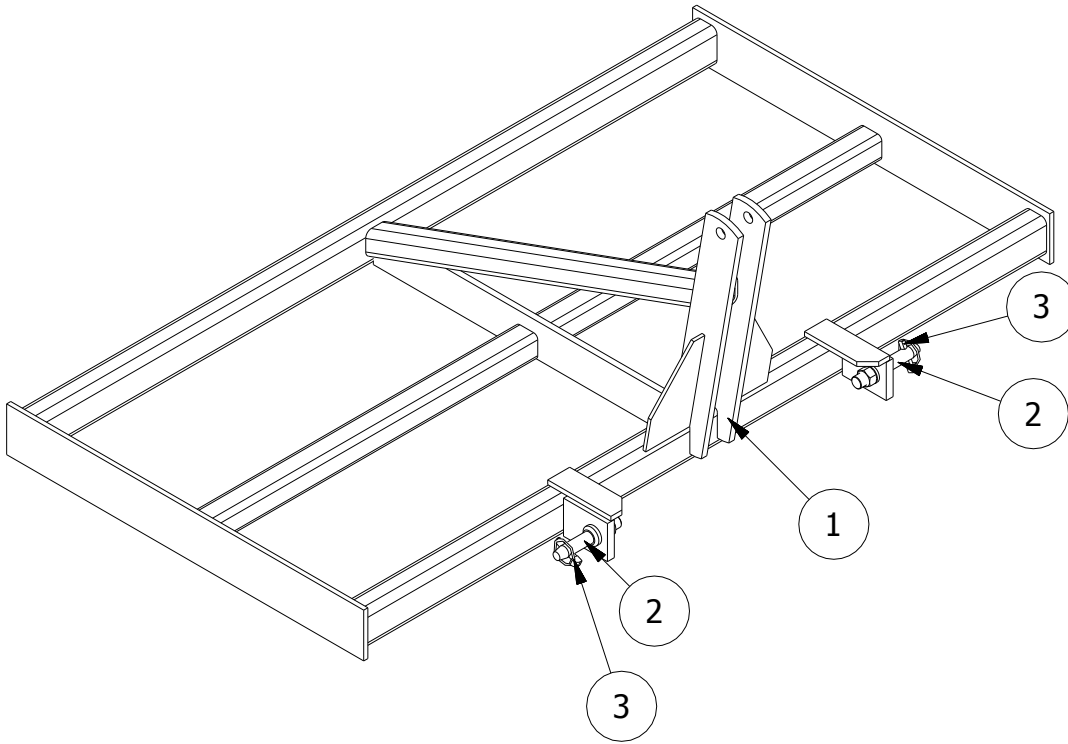
21-080-MFC
MODEL SHOWN



21-050-SRC
MODEL SHOWN

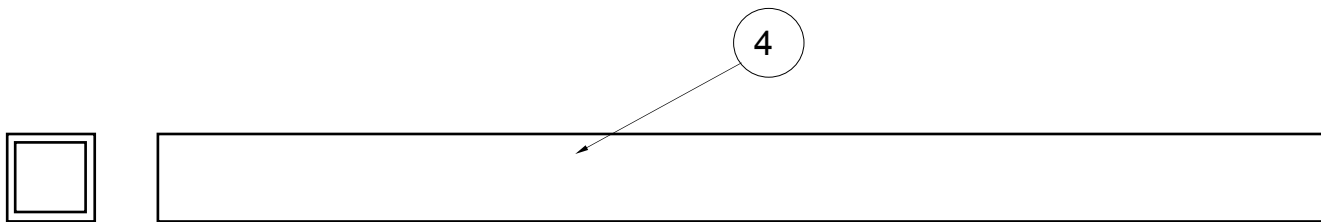


4'-2" & 5'-0" MINI MAIN FRAME (12 SHANK)
(21-082-081)



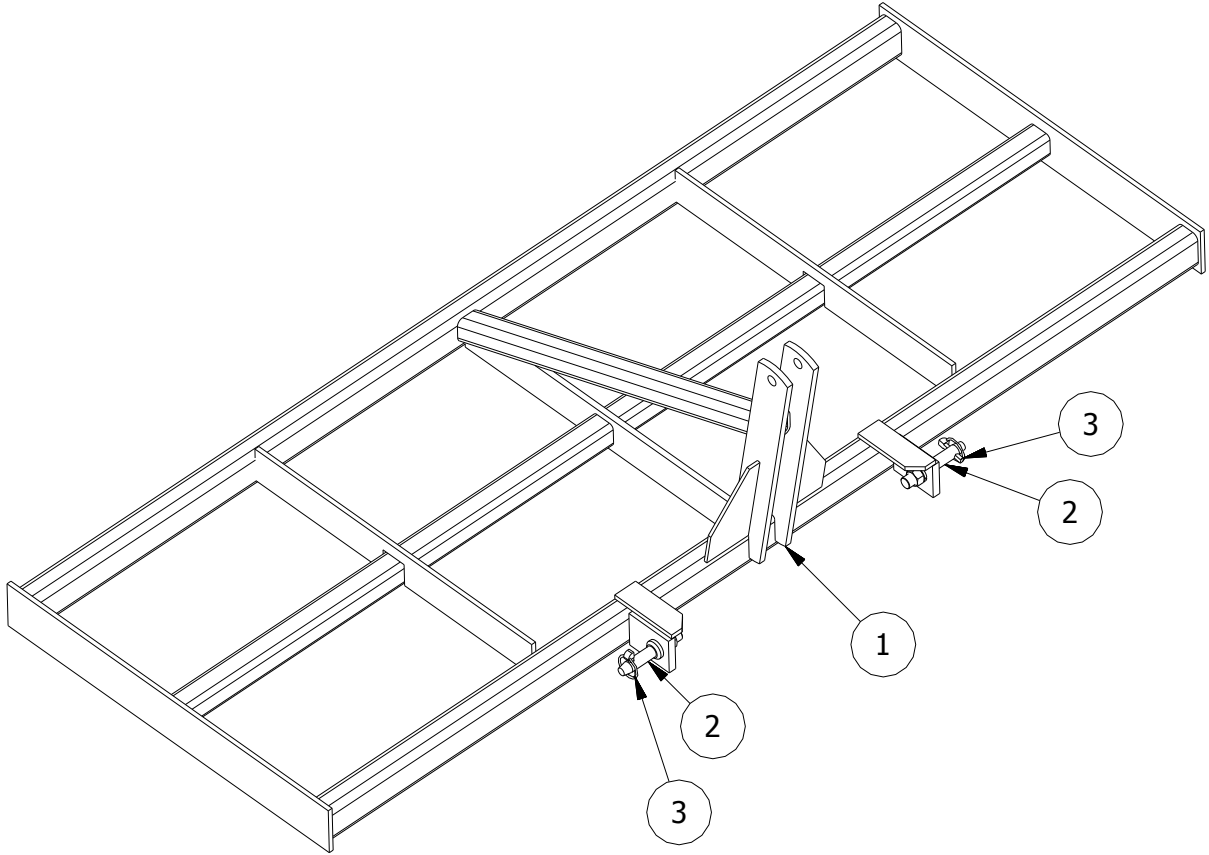
ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-094		12-SHANK MINI-FIELD CULTIVATOR	1
2	24-050-003		CAT. I LIFT ARM PIN	2
3	02-050-002		KLIK PIN, 7/16 X 1 3/4	2

2" X 2" TOOL BARS



ITEM	PART NO.	DESCRIPTION
4	04-024-131	62 1/2" X 2" SQ TOOL BAR
	21-024-073	76" X 2" SQ TOOL BAR
	02-024-061	90" X 2" SQ TOOL BAR

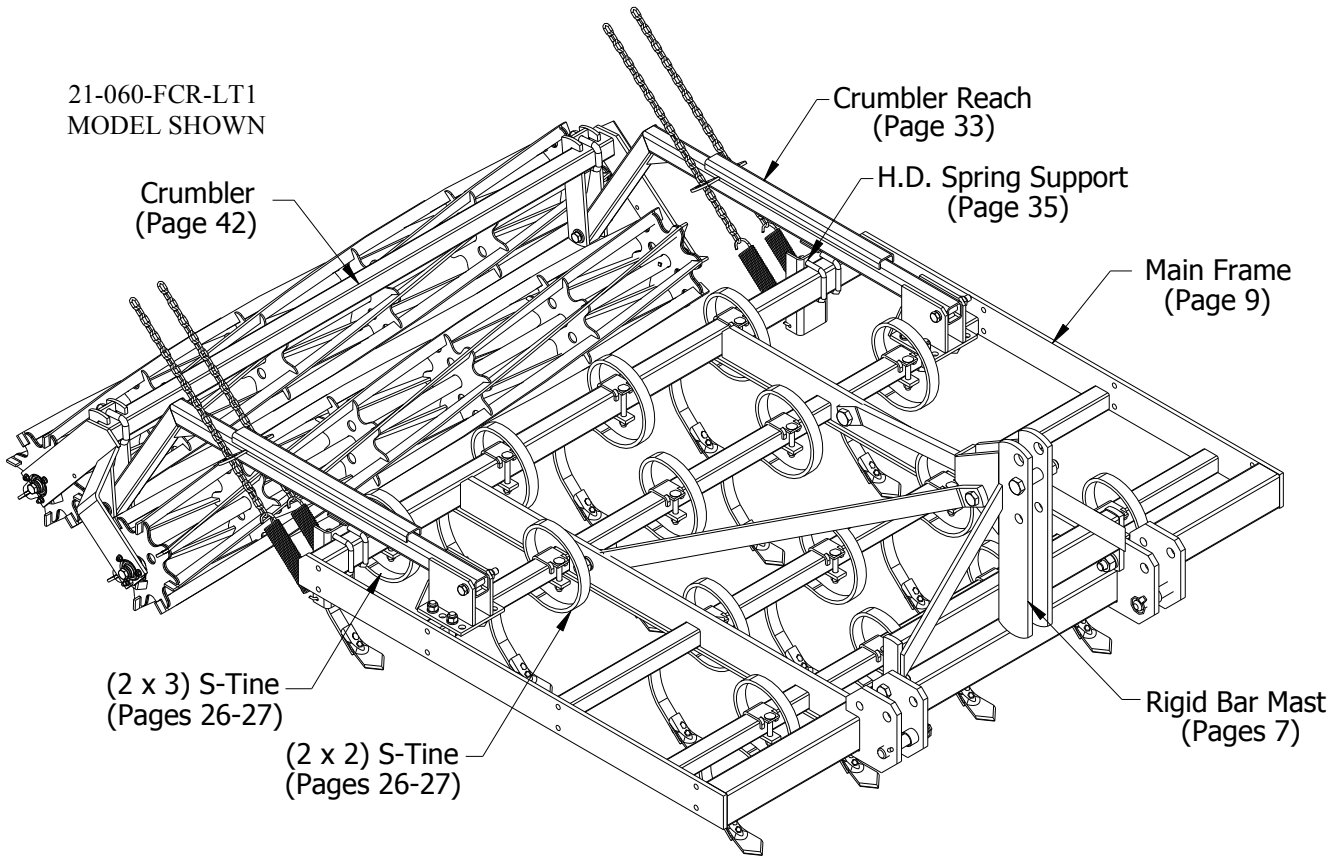
6'-8" MINI MAIN FRAME (16 SHANK)
(21-082-082)



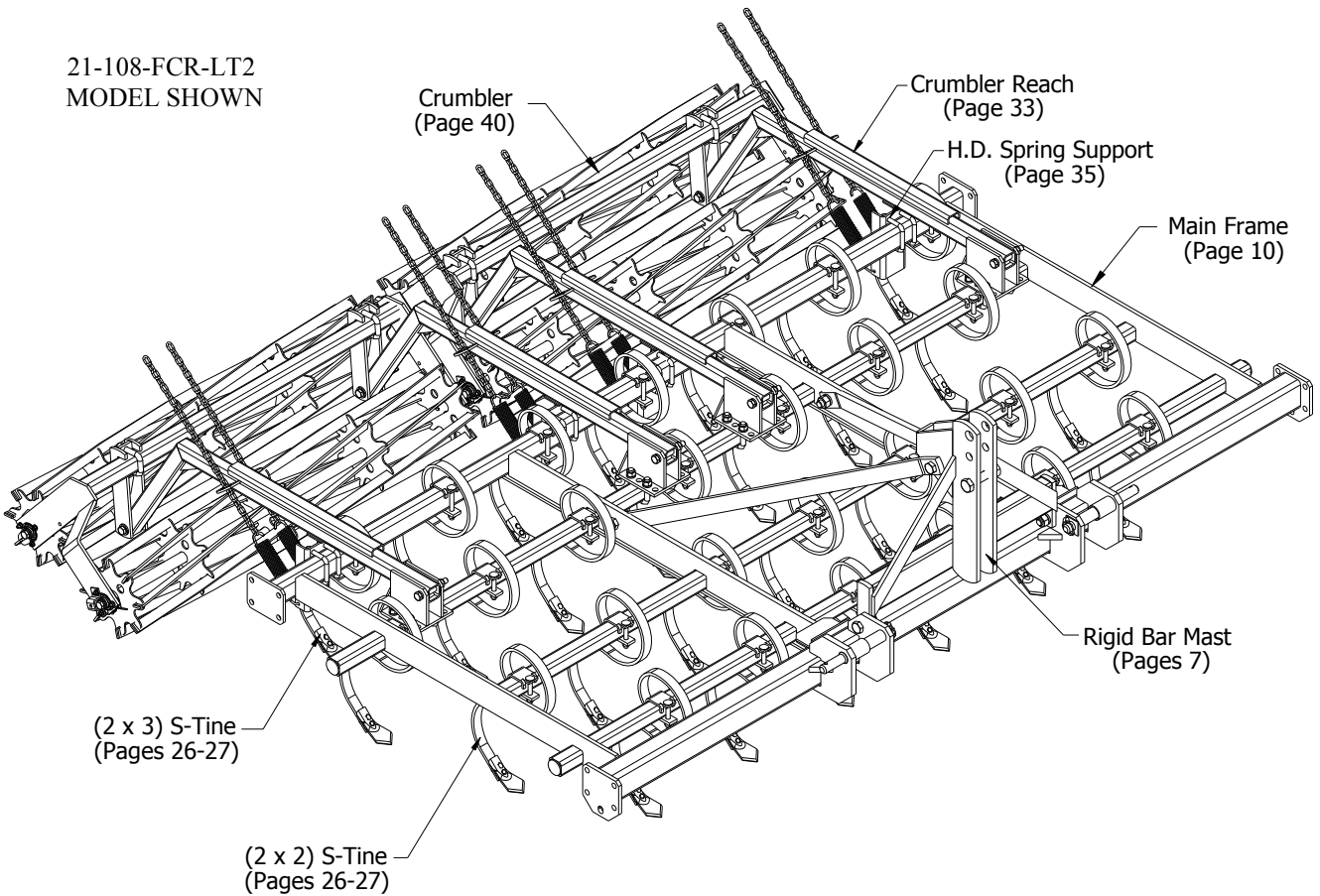
ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-095		16-SHANK MINI-FIELD CULTIVATOR	1
2	24-050-003		CAT. I LIFT ARM PIN	2
3	02-050-002		KLIK PIN, 7/16 X 1 3/4	2

LIFT-TYPE RIGID FIELDS CULTIVATORS AND WING EXTENSIONS

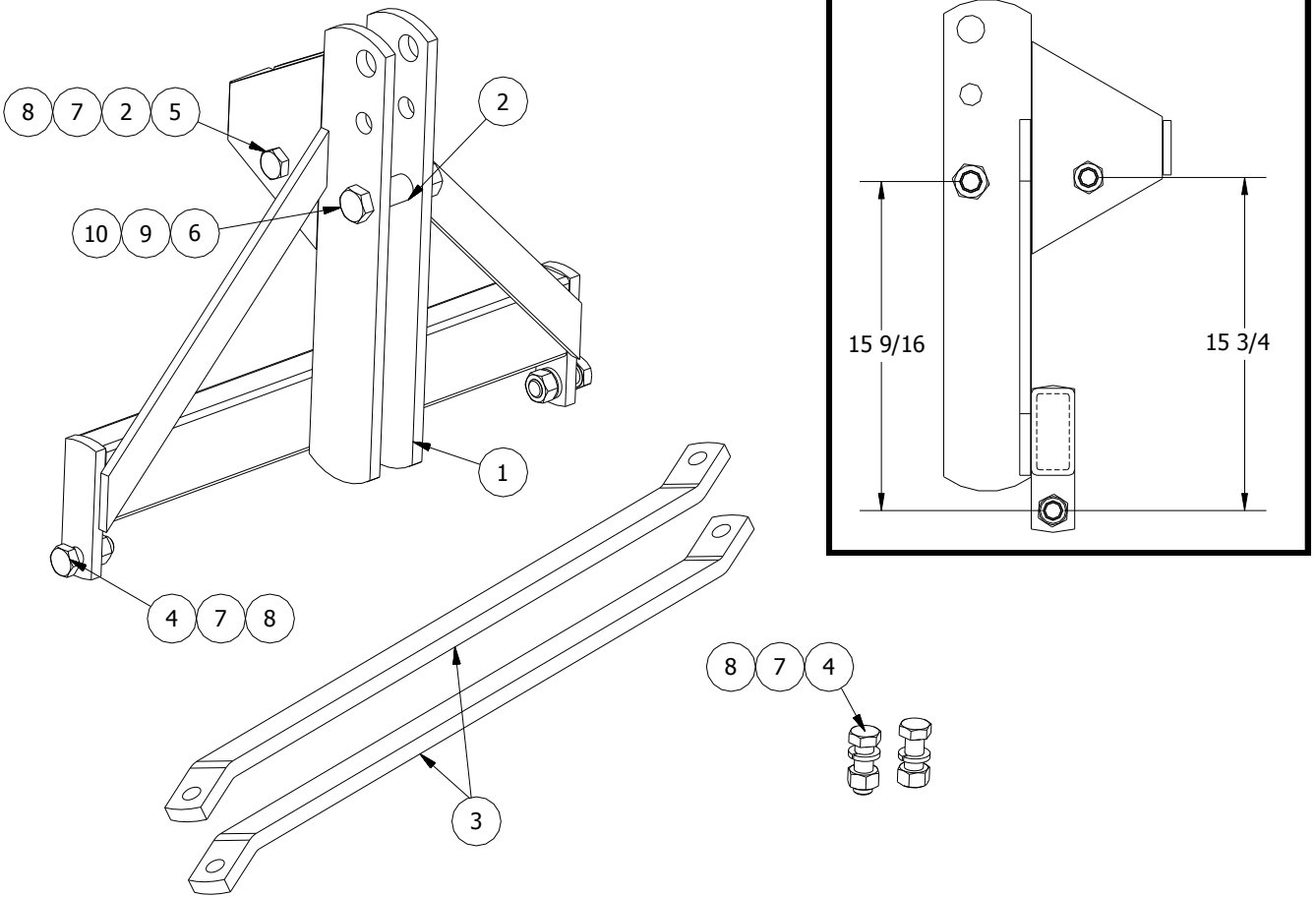
21-060-FCR-LT1
MODEL SHOWN



21-108-FCR-LT2
MODEL SHOWN

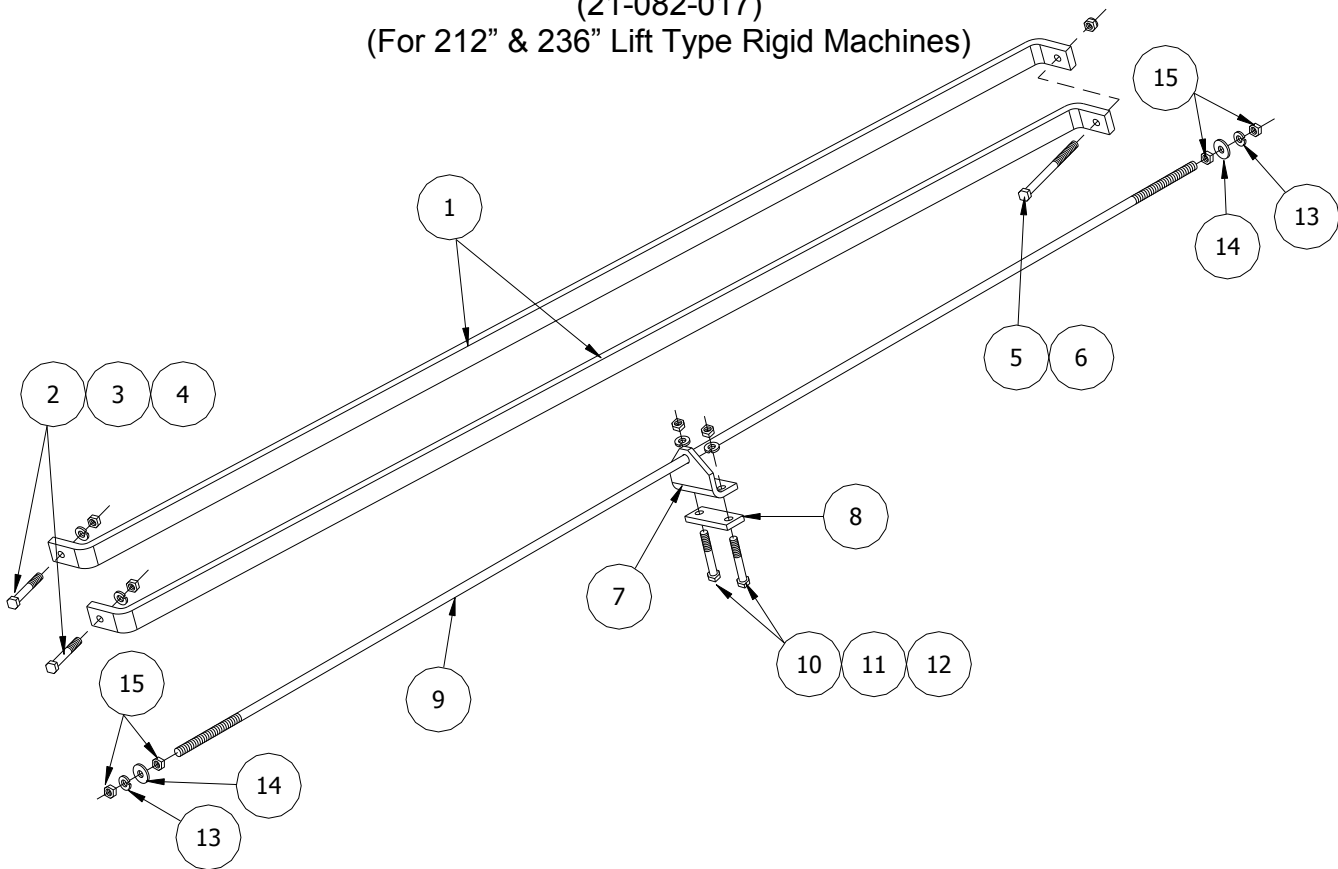


RIGID BAR MAST (21-082-002)



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-016	(-1985)	FIELD CULTIVATOR MAST	(1)
	21-080-125	(1986-)	MAST, '94	1
2	02-024-004		MAST SPACER	2
3	21-023-002		TENSION STRAP	2
4	48-091550		CAPSCREW, 7/8 X 2 1/2 G5 PLT	4
5	48-100250		CAPSCREW, 7/8 X 6 G5 PLT	1
6	48-100550		CAPSCREW, 1 X 4 1/2 G5 PLT	1
7	66-010400		LOCKWASHER, 7/8 PLT	5
8	68-010400		HEX NUT, 7/8 PLT	5
9	66-010450		LOCKWASHER, 1 PLT	1
10	68-010450		HEX NUT, 1 PLT	1
11	72-020100	(-1985)	LOCKNUT, 7/8 G"C" PLT	(3)

TENSION STRAPS (19 FOOT)
 (21-082-017)
 (For 212" & 236" Lift Type Rigid Machines)

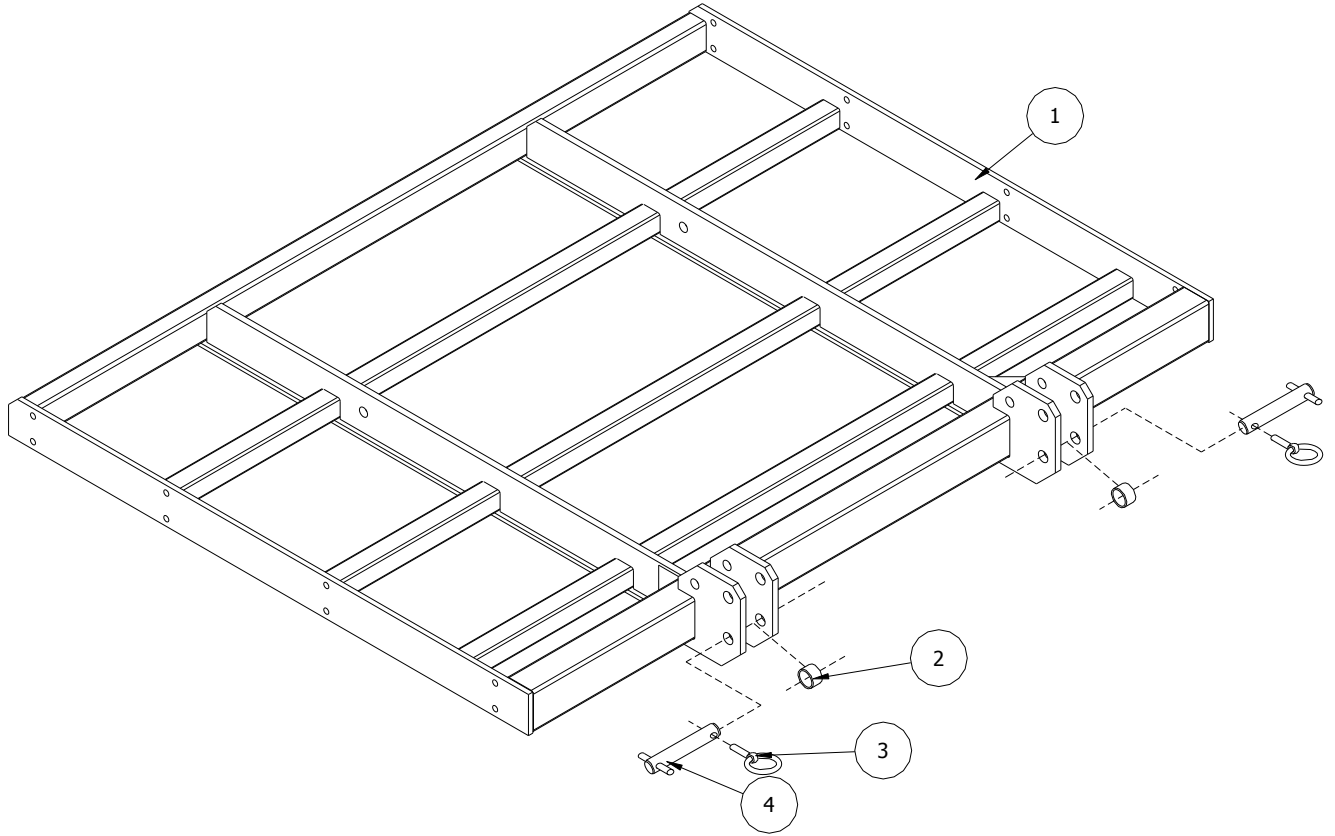


ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-023-034		TENSION STRAP (19 FOOT)	2
2	48-091550		CAPSCREW, 7/8 X 2 1/2 G5 PLT	2
3	66-010400		LOCKWASHER, 7/8 PLT	2
4	68-010400		HEX NUT, 7/8 PLT	2
5	48-100320	(-1987)	CAPSCREW, 7/8 X 7 G5 UNFIN	(1)
	48-100325	(1998-)	CAPSCREW, 7/8 X 7 1/2 G5 UNFIN	1
6	72-020100		LOCKNUT, 7/8 G"C" PLT	1
7	21-023-036		TRUSS BRACKET	1
8	21-023-037		TRUSS CAP	1
9	24-026-003		TRUSS ROD	1
10	48-091200		CAPSCREW, 5/8 X 6 G5 PLT	2
11	66-010300		LOCKWASHER, 5/8 PLT	2
12	68-010300		HEX NUT, 5/8 PLT	2
13	66-010350		LOCKWASHER, 3/4 PLT	2
14	62-010300		FLATWASHER, 3/4 PLT	2
15	68-010350		HEX NUT, 3/4 PLT	2

RIGID LIFT TYPE MAIN FRAME

(21-082-069)

(For 60" & 76" Machines)

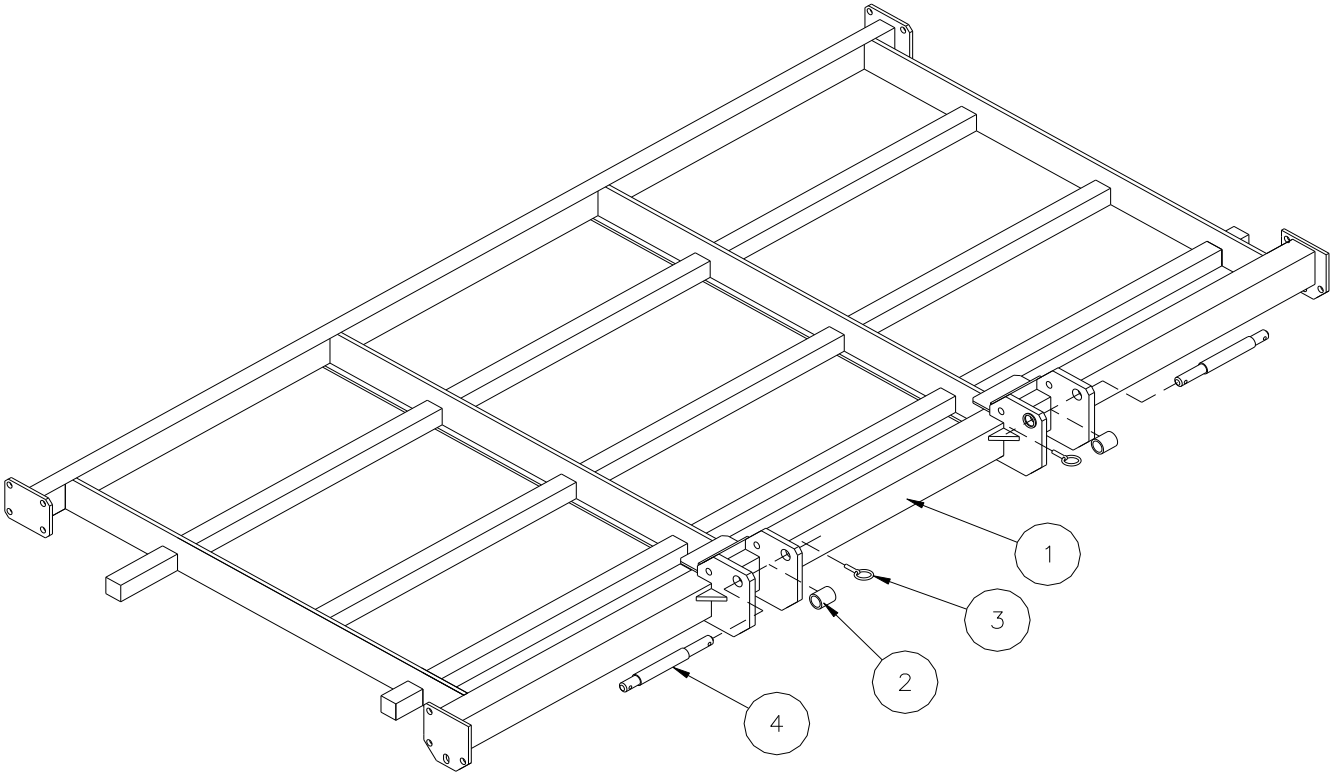


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-081		76" MAIN FRAME (4-BAR)	1
2	06-024-021		CAT. II SPACER	2
3	02-050-002		KLIK PIN, 7/16 X 1 3/4	2
4	03-050-088		HITCH PIN, 1 1/8	2

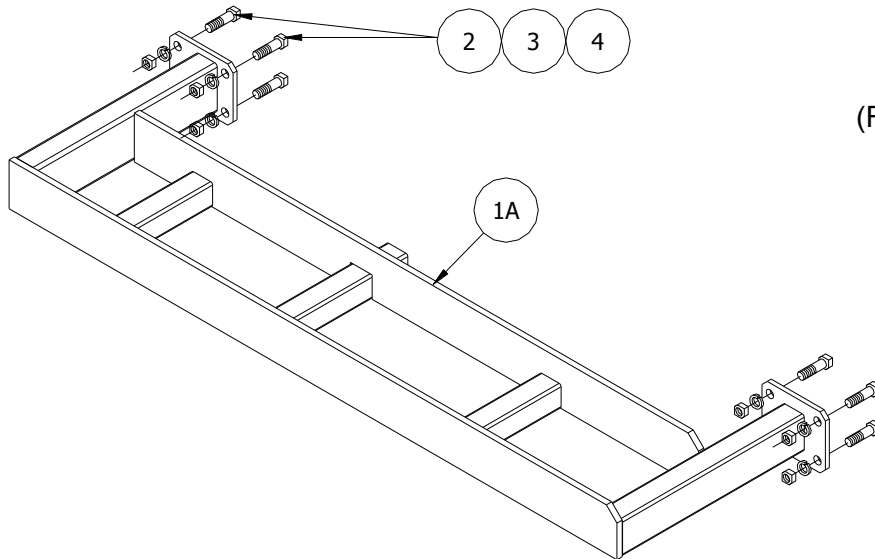
LIFT TYPE MAIN FRAME

(21-082-001)

(For 108", 148", 172", 188", 212" & 236" Machines)

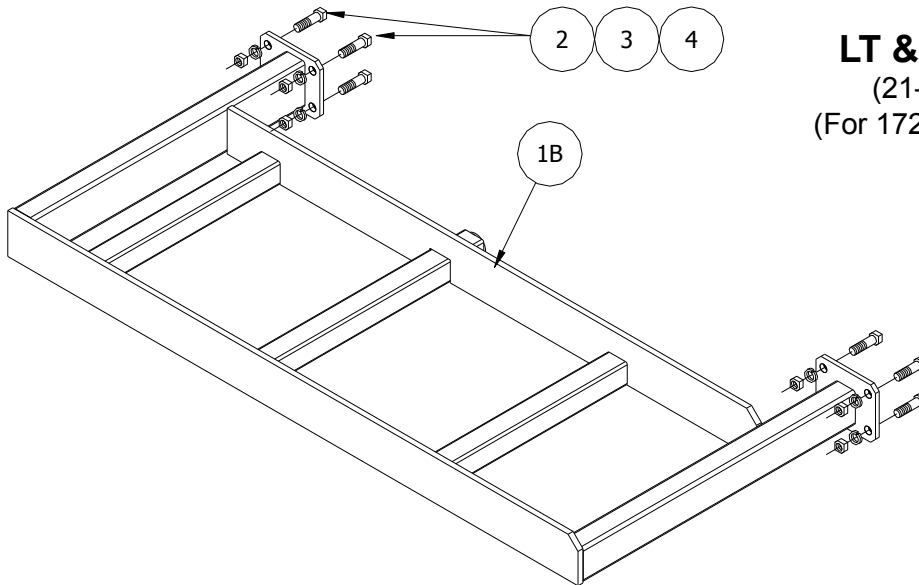


ITEM	PART NO.	SERIAL NO OR YR.	DESCRIPTION	QTY
1	21-080-002		FIELD CULTIVATOR MAIN FRAME	1
2	05-024-010		CAT. III SPACER	2
3	02-050-002		KLIK PIN, 7/16 X 1 3/4	2
4	03-026-126		STEP HITCH PIN	2



LT & RT WING (1 FOOT)
 (21-082-003 & 21-082-004)
 (For 148" Lift Type Rigid Machine)

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				LT	RT
1A	21-080-005		LT WING (1 FOOT)	1	-
	21-080-006		RT WING (1 FOOT)	-	1
2	48-090920		CAPSCREW, 5/8 X 1 3/4 G5 PLT	8	8
3	66-010300		LOCKWASHER, 5/8 PLT	8	8
4	68-010300		HEX NUT, 5/8 PLT	8	8



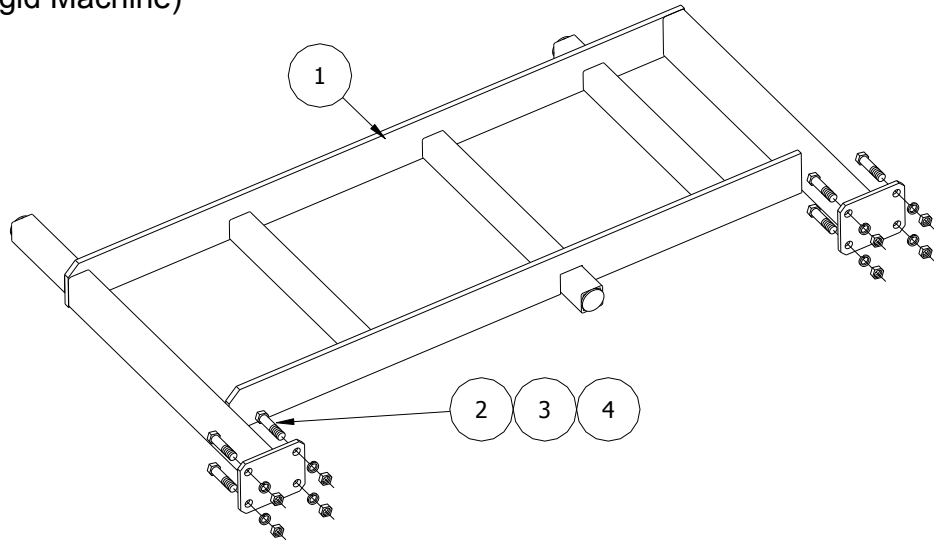
LT & RT WING (2 FOOT)
 (21-082-005 & 21-082-006)
 (For 172" Lift Type Rigid Machine)

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				LT	RT
1B	21-080-003		LT WING (2 FOOT)	1	-
	21-080-004		RT WING (2 FOOT)	-	1
2	48-090920		CAPSCREW, 5/8 X 1 3/4 G5 PLT	8	8
3	66-010300		LOCKWASHER, 5/8 PLT	8	8
4	68-010300		HEX NUT, 5/8 PLT	8	8

LT WING (3 FOOT)

(21-082-078)

(For 188" Lift Type Rigid Machine)

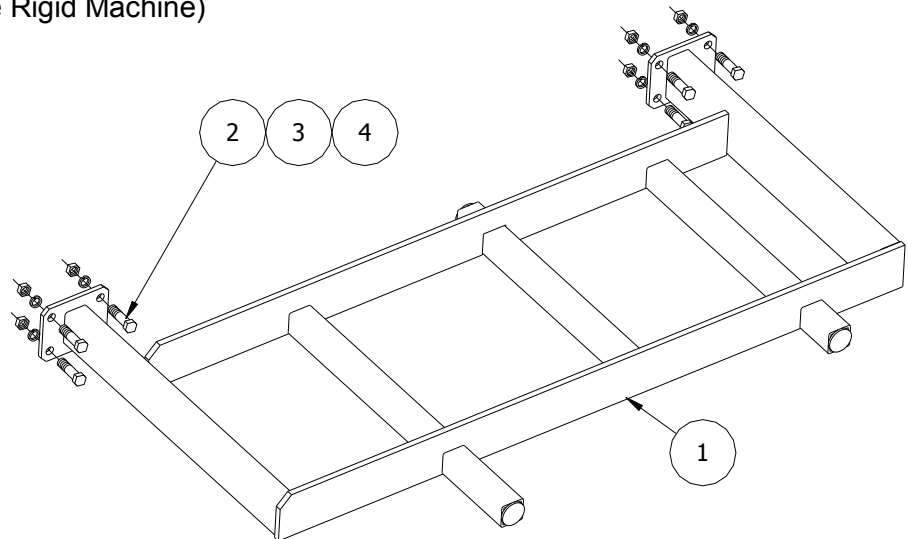


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-089		LT WING (3 FOOT)	1
2	48-090920		CAPSCREW, 5/8 X 1 3/4 G5 PLT	8
3	66-010300		LOCKWASHER, 5/8 PLT	8
4	68-010300		HEX NUT, 5/8 PLT	8

RT WING (3 FOOT)

(21-082-079)

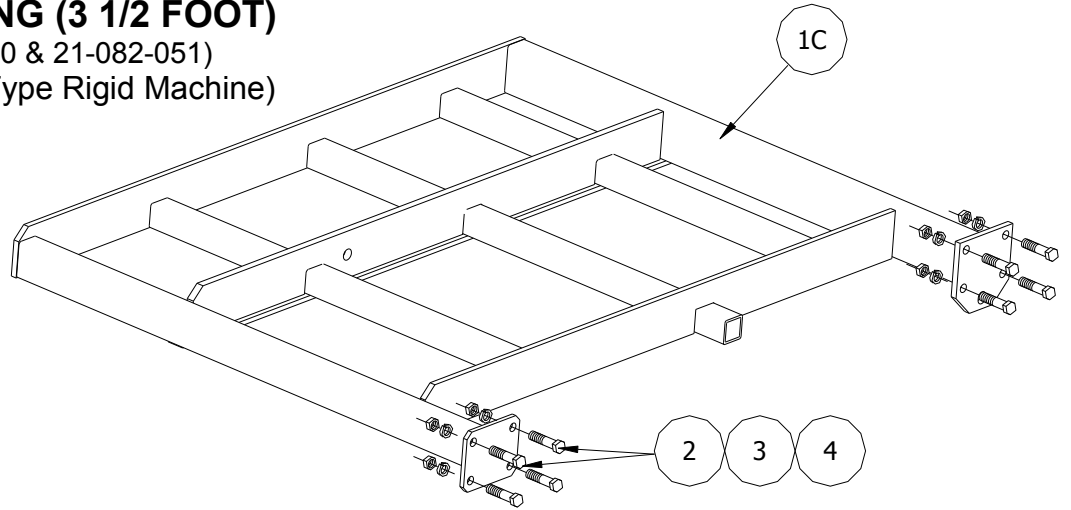
(For 188" Lift Type Rigid Machine)



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-090		RT WING (3 FOOT)	1
2	48-090920		CAPSCREW, 5/8 X 1 3/4 G5 PLT	8
3	66-010300		LOCKWASHER, 5/8 PLT	8
4	68-010300		HEX NUT, 5/8 PLT	8

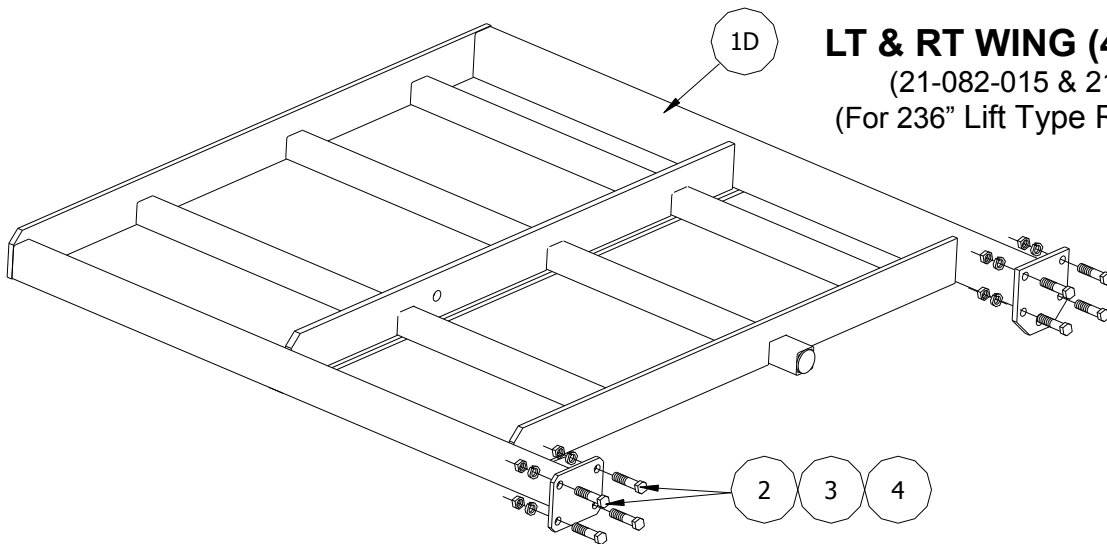
LT & RT WING (3 1/2 FOOT)

(21-082-050 & 21-082-051)
(For 212" Lift Type Rigid Machine)



LT & RT WING (4 1/2 FOOT)

(21-082-015 & 21-082-016)
(For 236" Lift Type Rigid Machine)

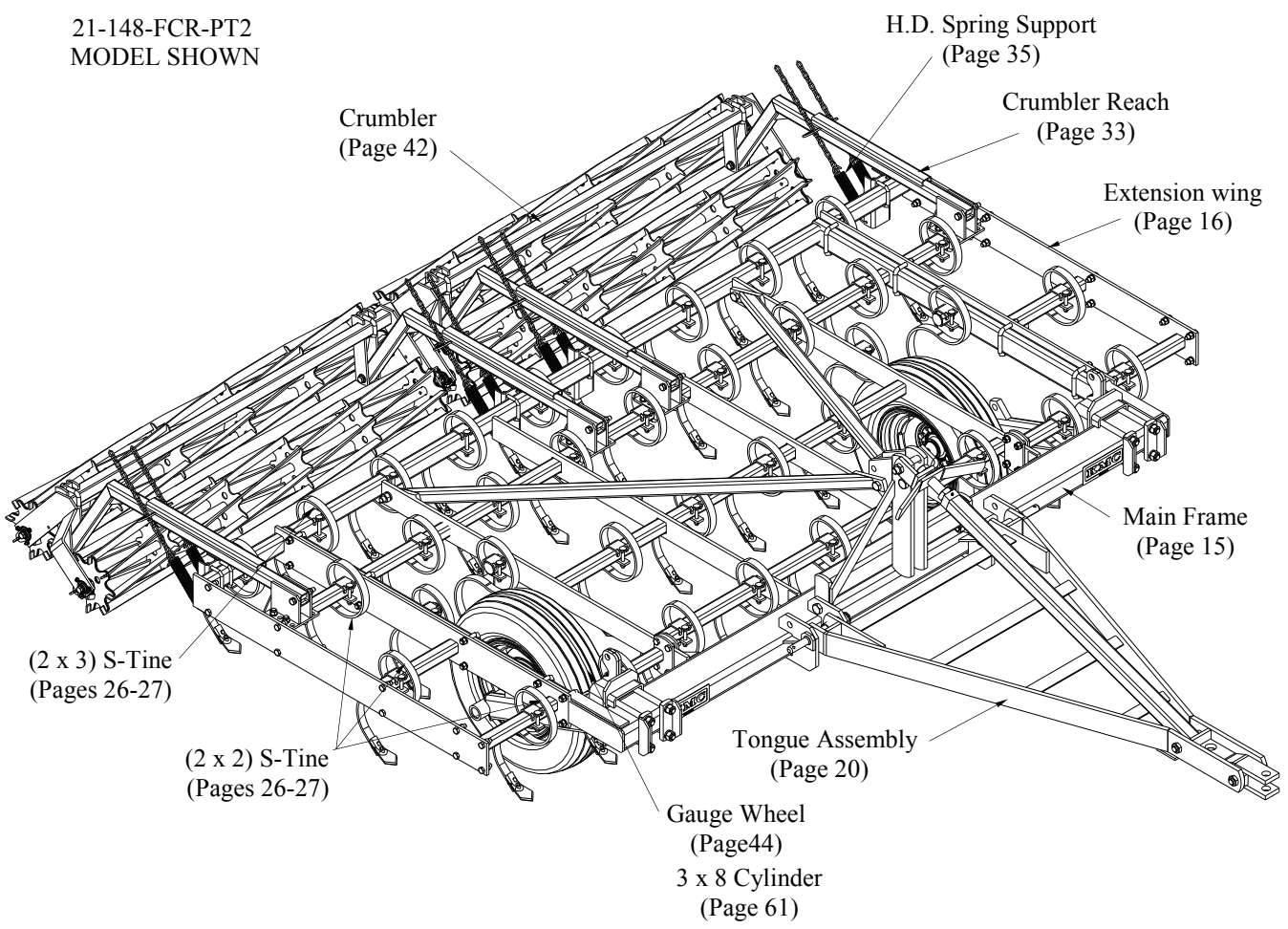


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				LT	RT
1C	21-080-065		LT WING (3 1/2 FOOT)	1	-
	21-080-066		RT WING (3 1/2 FOOT)	-	1
2	48-090920		CAPSCREW, 5/8 X 1 3/4 G5 PLT	8	8
3	66-010300		LOCKWASHER, 5/8 PLT	8	8
4	68-010300		HEX NUT, 5/8 PLT	8	8

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				LT	RT
1D	21-080-012		LT WING (4 1/2 FOOT)	1	-
	21-080-013		RT WING (4 1/2 FOOT)	-	1
2	48-090920		CAPSCREW, 5/8 X 1 3/4 G5 PLT	8	8
3	66-010300		LOCKWASHER, 5/8 PLT	8	8
4	68-010300		HEX NUT, 5/8 PLT	8	8

PULL-TYPE RIGID FIELD CULTIVATORS AND WING EXTENSIONS

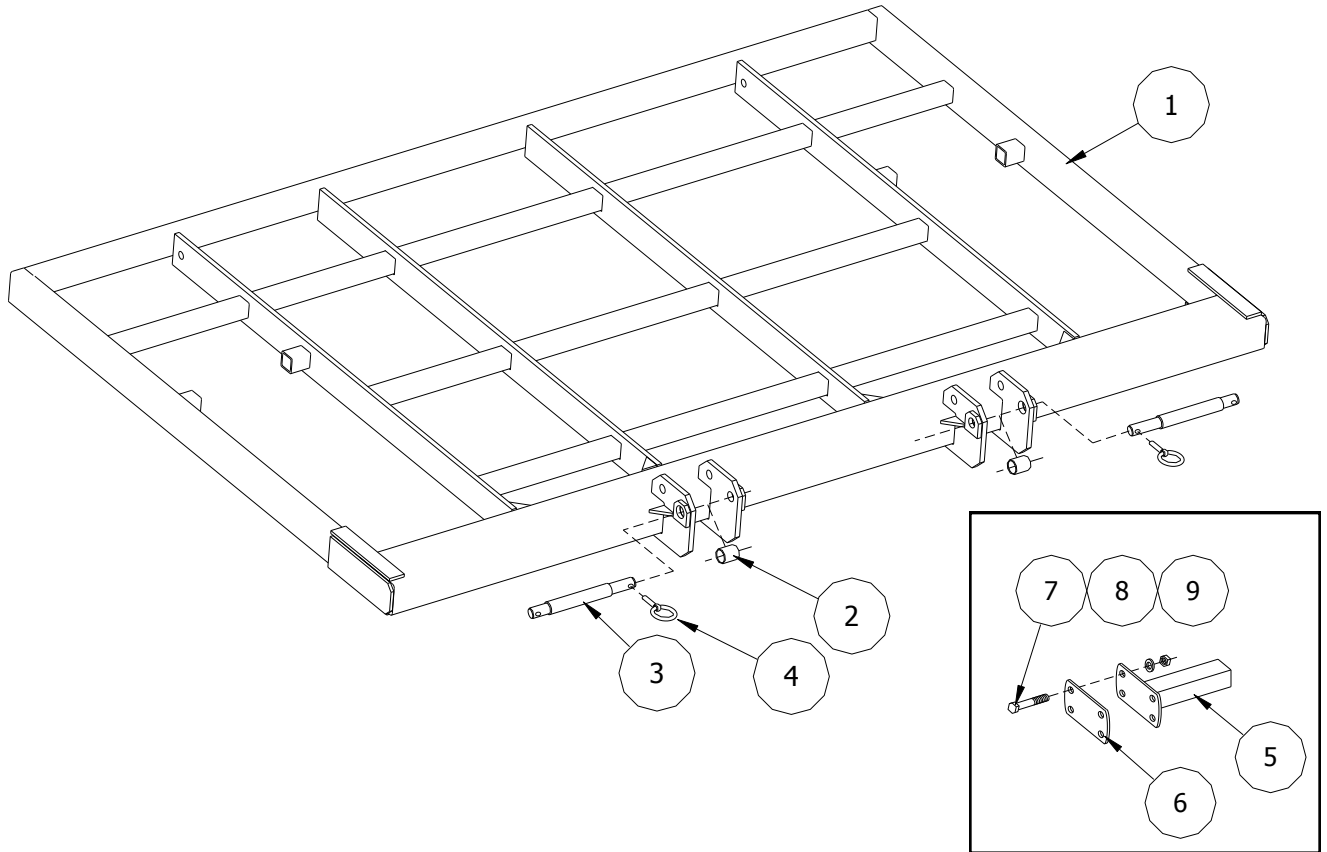
21-148-FCR-PT2
MODEL SHOWN



118" PULL-TYPE MAIN FRAME

(21-082-072)

(All Models)

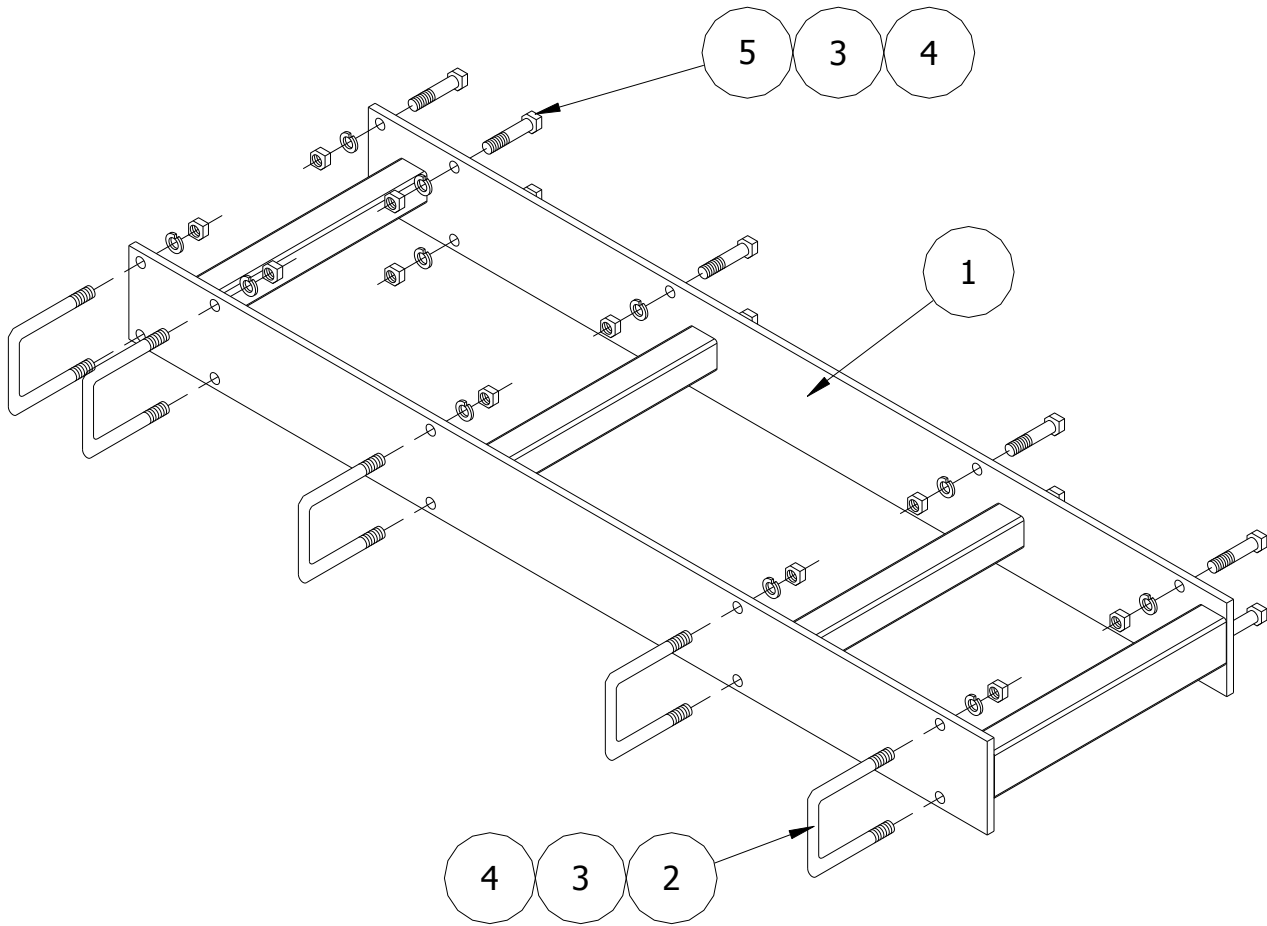


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-086		118" MAIN FRAME (4-BAR)	1
2	05-024-010		CAT. III SPACER	2
3	05-026-008		STEP HITCH PIN, LONG	2
4	02-050-002		KLIK PIN, 7/16 X 1 3/4	2
5	21-080-105		BRACKET, 11" EXT	2
6	21-023-163		CAP, 4"	2
7	48-090983		CAPSCREW, 5/8 X 2 1/4	8
8	66-010300		LOCKWASHER, 5/8 PLT	8
9	68-010300		HEX NUT, 5/8 PLT	8

18 1/2" (PULL-TYPE) RIGID CULTIVATOR WING

(21-082-070)

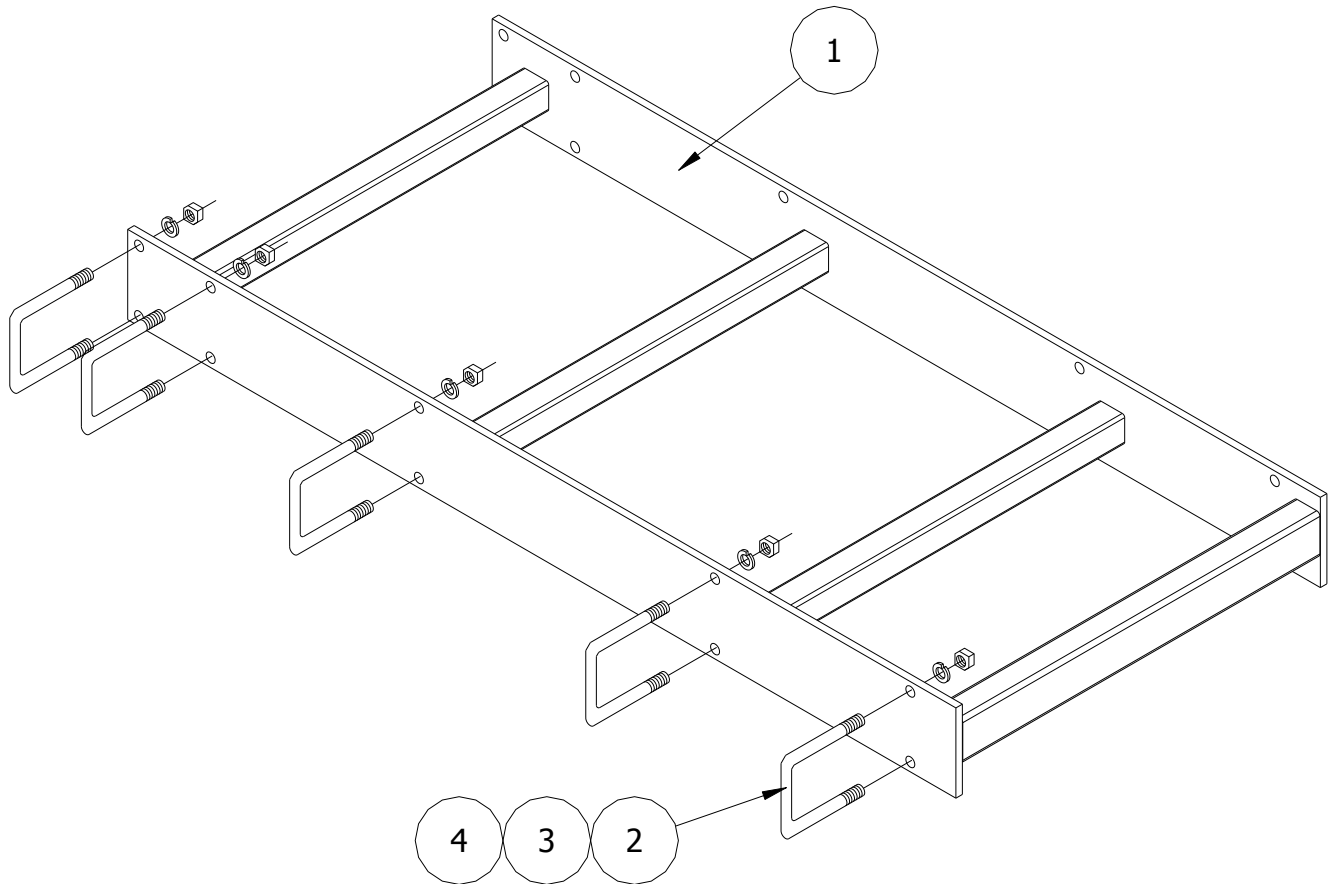
(For 148", 188" & 212" Machines)



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-084		1'-4" (PULL-TYPE) RIGID CULT WING	1
2	05-050-003		"U"-BOLT, 5/8 X 4 11/16 X 3 3/8	5
3	66-010300		LOCKWASHER, 5/8 PLT	20
4	68-010300		HEX NUT, 5/8 PLT	20
5	48-090920		CAPSCREW, 5/8 X 1 3/4 G5 PLT	10

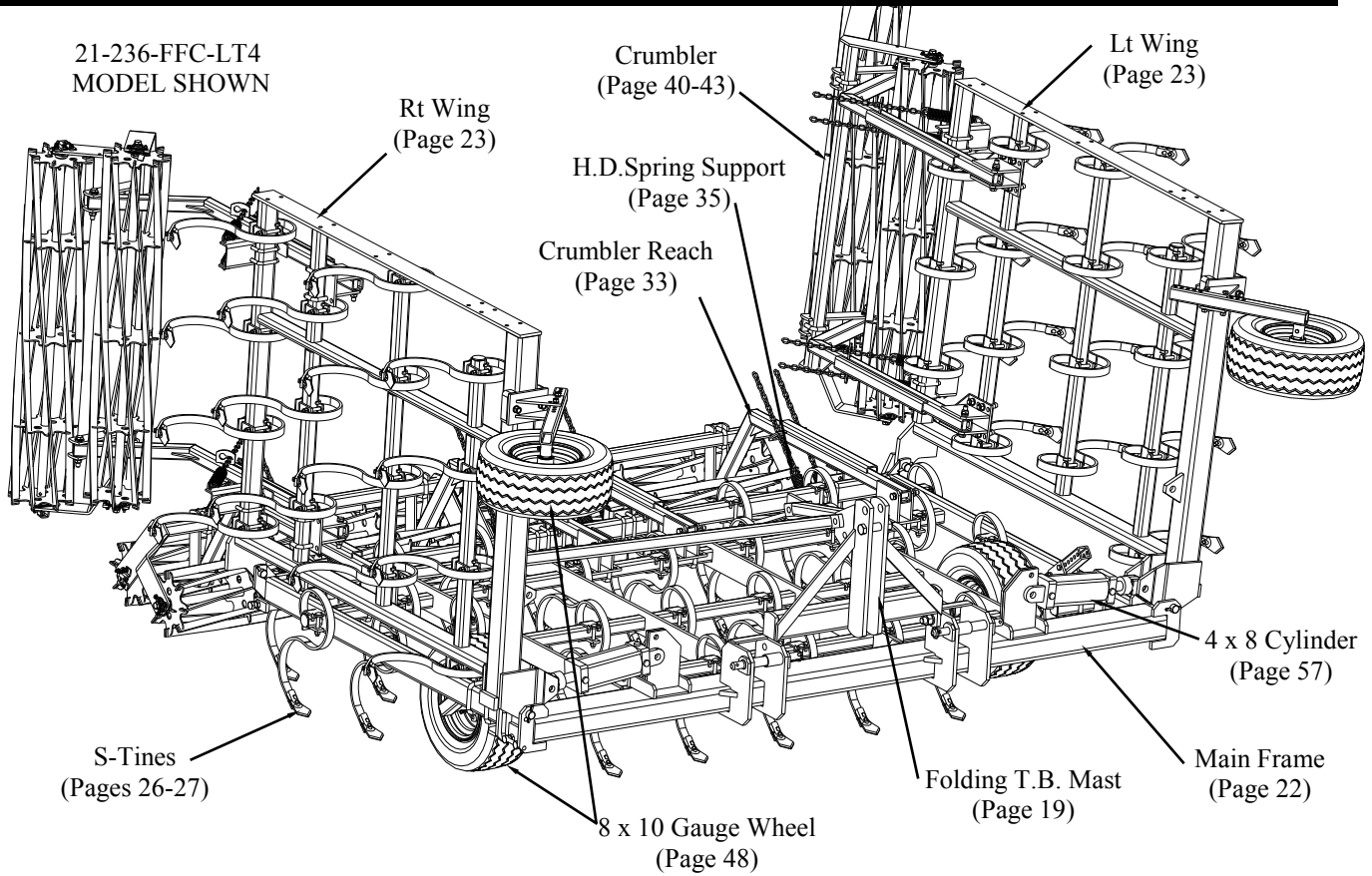
28 1/2" (PULL-TYPE) RIGID CULTIVATOR WING

(21-082-071)
(For 172" Machine)

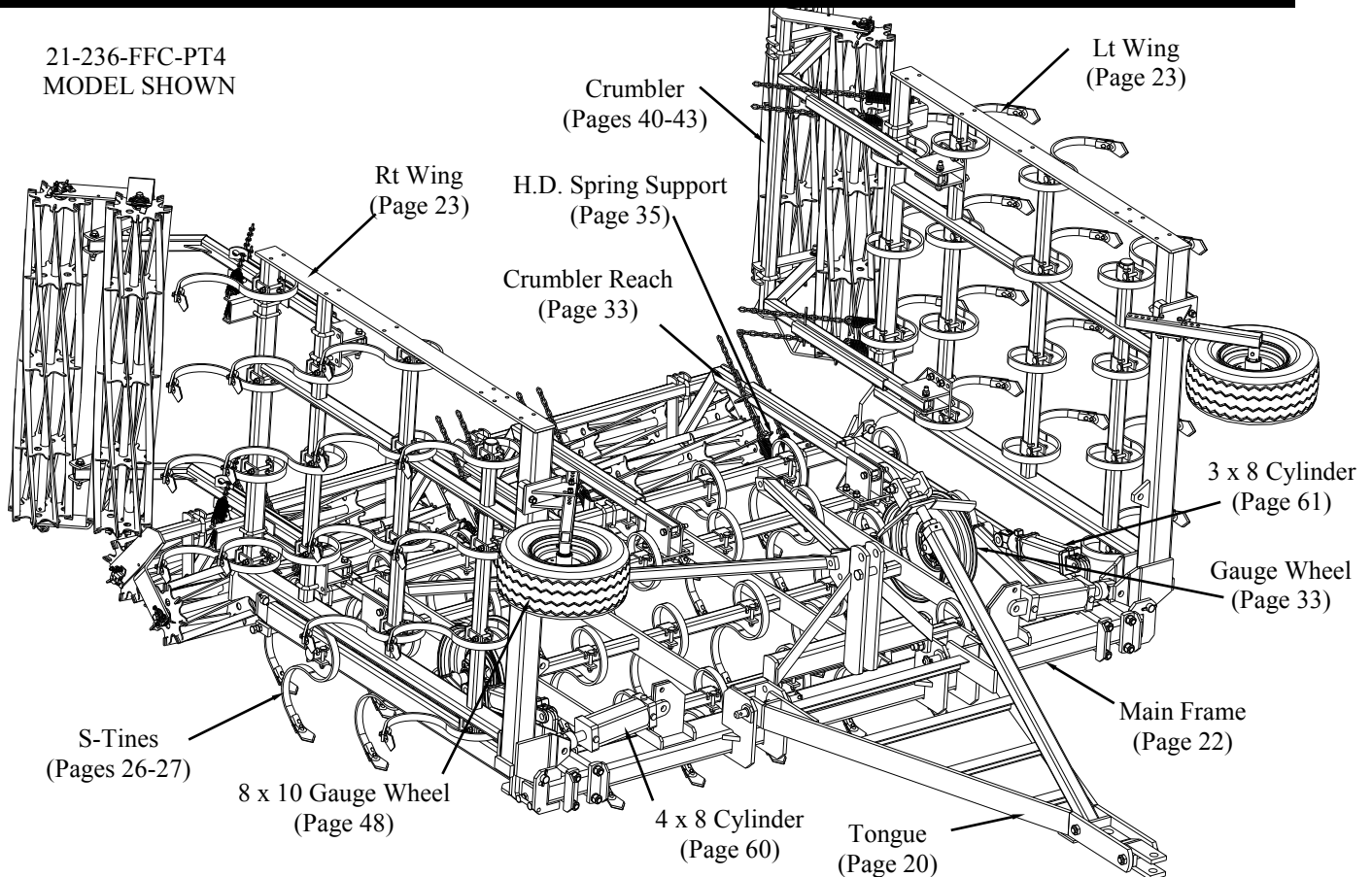


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-085		28 1/2" (PULL-TYPE) RIGID CULT WING	1
2	05-050-003		"U"-BOLT, 5/8 X 4 11/16 X 3 3/8	5
3	66-010300		LOCKWASHER, 5/8 PLT	10
4	68-010300		HEX NUT, 5/8 PLT	10

FOLDING LIFT-TYPE FIELD CULTIVATORS & WINGS



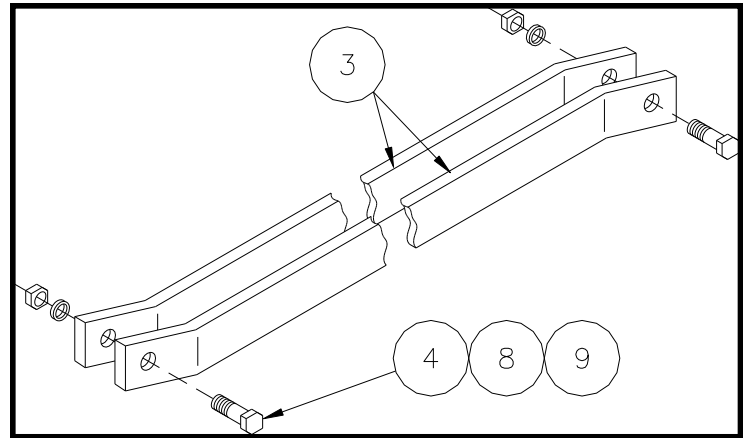
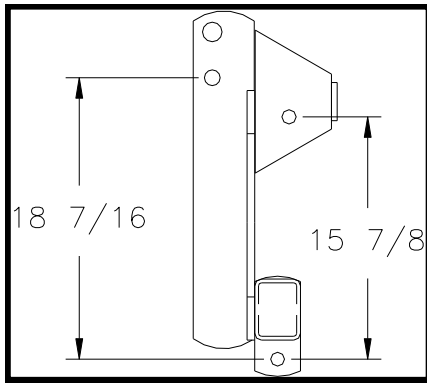
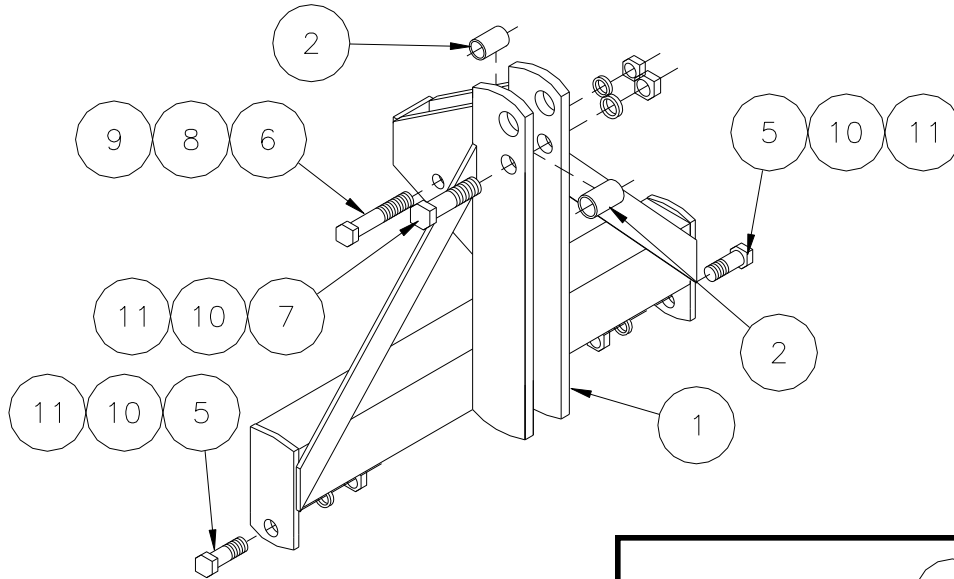
FOLDING PULL-TYPE FIELD CULTIVATORS & WINGS & EXTENSIONS



FOLDING TOOL BAR MAST

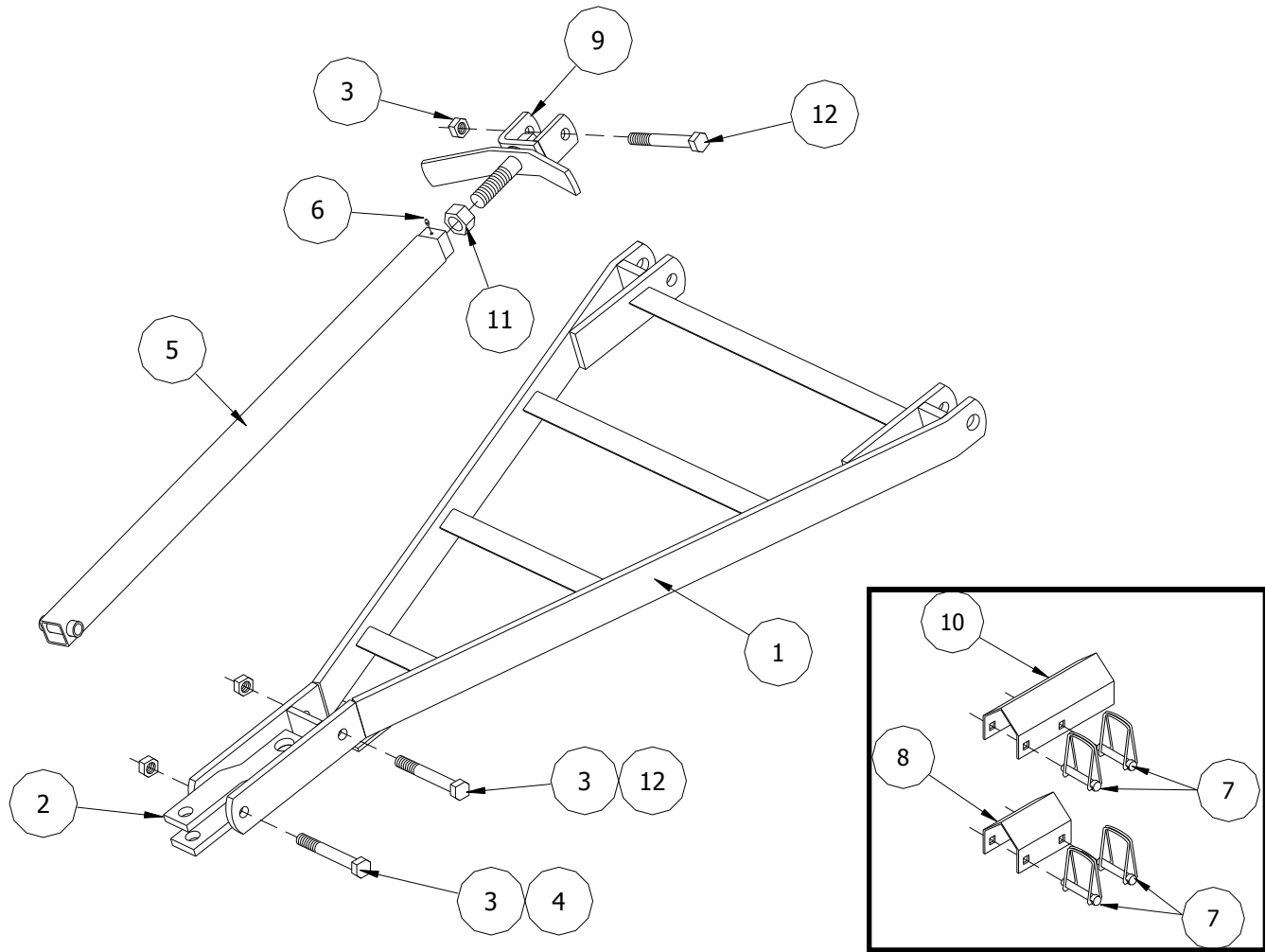
(21-082-019)

(For Lift-Type & Pull-Type Folding Machines)



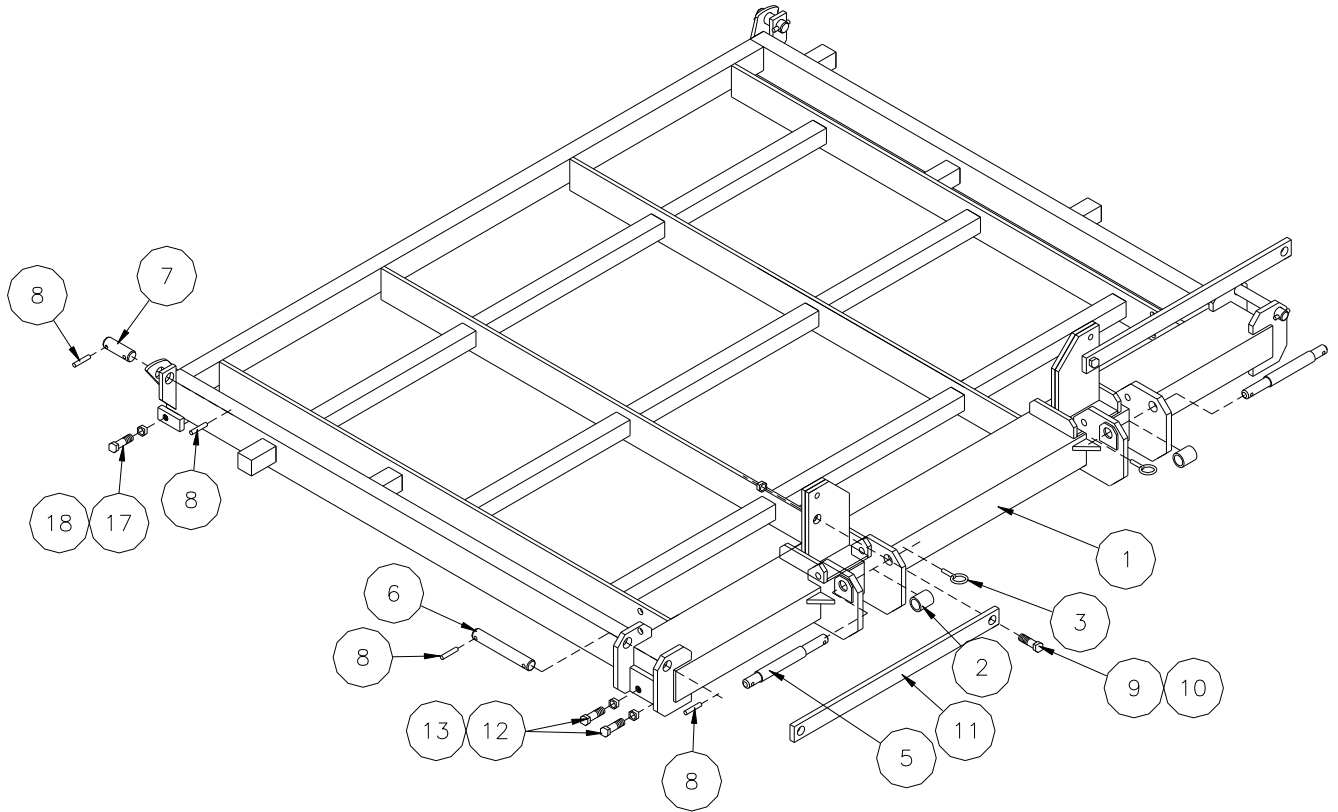
ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-032	(-1985)	FIELD CULTIVATOR MAST	(1)
	21-080-126	(1986-)	FOLDING FIELD CULTIVATOR MAST	1
2	02-024-004		MAST SPACER	2
3	21-023-083		TENSION STRAP	2
4	48-100480		CAPSCREW, 1 X 2 1/2 G5 PLT	2
5	48-200100		CAPSCREW, 7/8 X 3 G8 PLT	2
6	48-200150		CAPSCREW, 7/8 X 7 G8 PLT	1
7	48-100600		CAPSCREW, 1 X 5 G5 PLT	1
8	66-010400		LOCKWASHER, 7/8 PLT	3
9	68-010400		HEX NUT, 7/8 PLT	3
10	66-010450		LOCKWASHER, 1 PLT	3
11	68-010450		HEX NUT, 1 PLT	3
12	72-020100	(-1985)	LOCKNUT, 7/8 G"C" PLT	(1)
	72-020125	(-1985)	LOCKNUT, 1 G"C" PLT	(2)

TONGUE ASSEMBLY (FOLDING)
 (21-082-033)
 (For Pull-Type Rigid and Folding Machines)



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-044		TONGUE WELDMENT (FOLDING)	1
2	21-080-042		CLEVIS WELDMENT	1
3	72-040100		LOCKNUT, 1" JAM G"A" PLT	3
4	05-050-017		HEX SCREW, 1" -8 NC X 6 1/2	1
5	21-080-040		ADJUSTMENT TUBE	1
6	02-050-005		GREASE FITTING, 1/4-28 STR	1
7	21-050-012		SNAPPER PINS, 3/8 X 2 3/4	4
8	21-027-004		LIFT WHEEL TRANS LOCKOUT	1
9	21-080-041		YOKE WELDMENT	1
10	21-027-007		8 1/2 LIFT WHEEL TRANS LOCKOUT	1
11	70-010300		1 1/2 JAM NUT, PLN	1
12	48-100625		CAPSCREW, 1 X 6 1/2 G5 PLT	2

88" MAIN FRAME
 (21-082-121)
 (For 200" Lift-Type & Pull-Type Folding Machines)

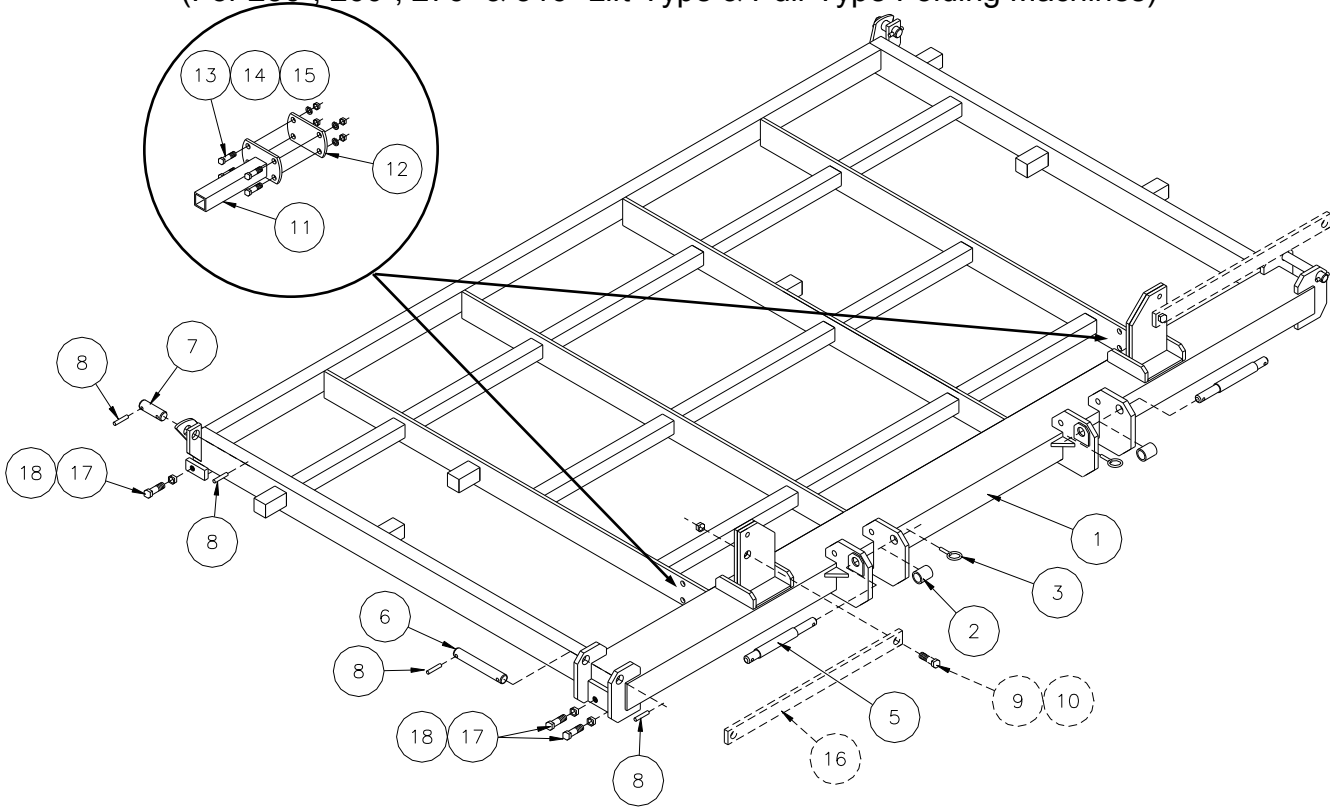


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-143		MAIN FRAME, 88" FF CULT	1
2	05-024-010		CAT. III SPACER	2
3	02-050-002		KLIK PIN, 7/16 X 1 3/4	2
5	05-026-008		STEP HITCH PIN (LONG)	2
6	21-026-006		FRONT PIVOT PINS	2
7	21-026-005		REAR PIVOT PINS	2
8	02-050-003		SPIROL PINS	8
9	48-091350		CAPSCREW, 3/4 X 2 1/2 G5 PLT	5
10	72-010150		LOCK NUT, 3/4 PLT	5
11	21-023-200		STRAP, FIELD CULTIVATOR	5
12	48-091275		CAPSCREW, 3/4 X 2 G5 PLT	6
13	70-010150		JAM NUT, 3/4	6

120" MAIN FRAME

(21-082-018)

(For 236", 260", 276" & 316" Lift-Type & Pull-Type Folding Machines)

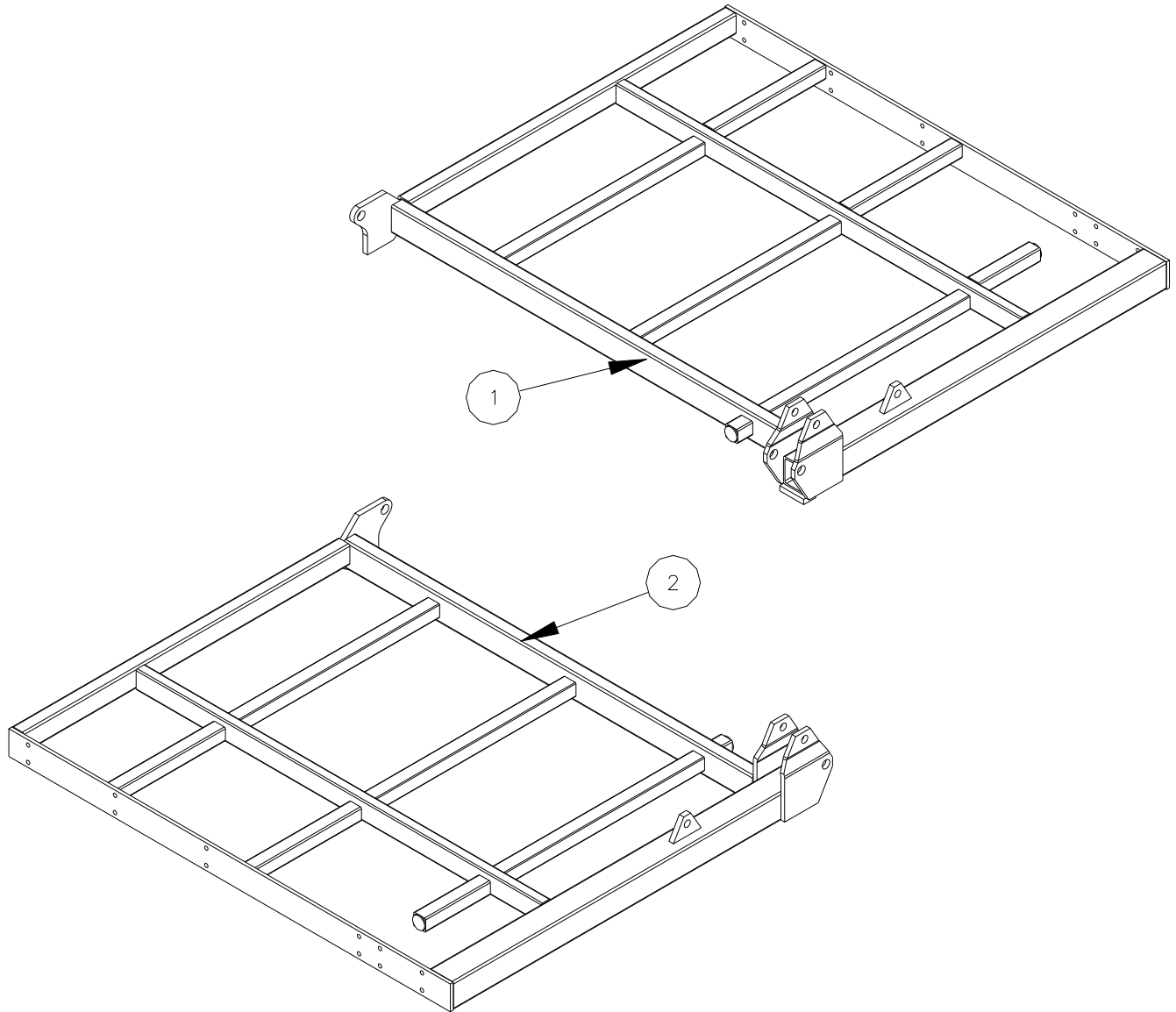


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-026		FOLDING FIELD CULT. MAIN FRAME	1
2	05-024-010		CAT. III SPACER	2
3	02-050-002		KLIK PIN, 7/16 X 1 3/4	2
5	05-026-008		STEP HITCH PIN (LONG)	2
6	21-026-006		FRONT PIVOT PINS	2
7	21-026-005		REAR PIVOT PINS	2
8	02-050-003		SPIROL PINS	8
9	48-091350	(-2014)	CAPSCREW, 3/4 X 2 1/2 G5 PLT	5
10	72-010150	(-2014)	LOCK NUT, 3/4 PLT	5
11	21-080-105		BRACKET, 11" EXT	2
12	21-023-163		CAP, 4"	2
13	48-090983		CAPSCREW, 5/8 X 2 1/4 G5 PLT	8
14	66-010300		LOCKWASHER, 5/8 PLT	8
15	68-010300		HEX NUT, 5/8 PLT	8
16	21-023-200	(-2014)	STRAP, FIELD CULTIVATOR	5
17	48-091275		CAPSCREW, 3/4 X 2 G5 PLT	6
18	70-010150		JAM NUT, 3/4	6

LT & RT 60" FOLDING WINGS

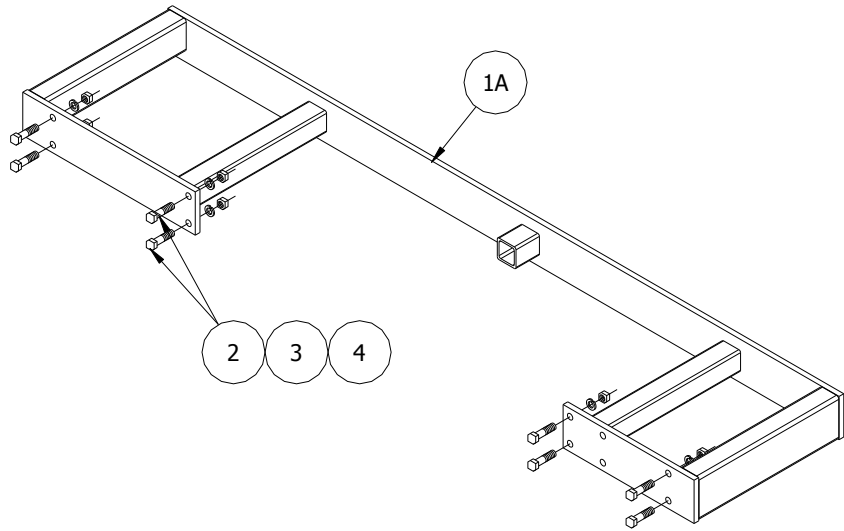
(For Lift-Type & Pull-Type Folding)

(21-082-020 & 21-082-021)

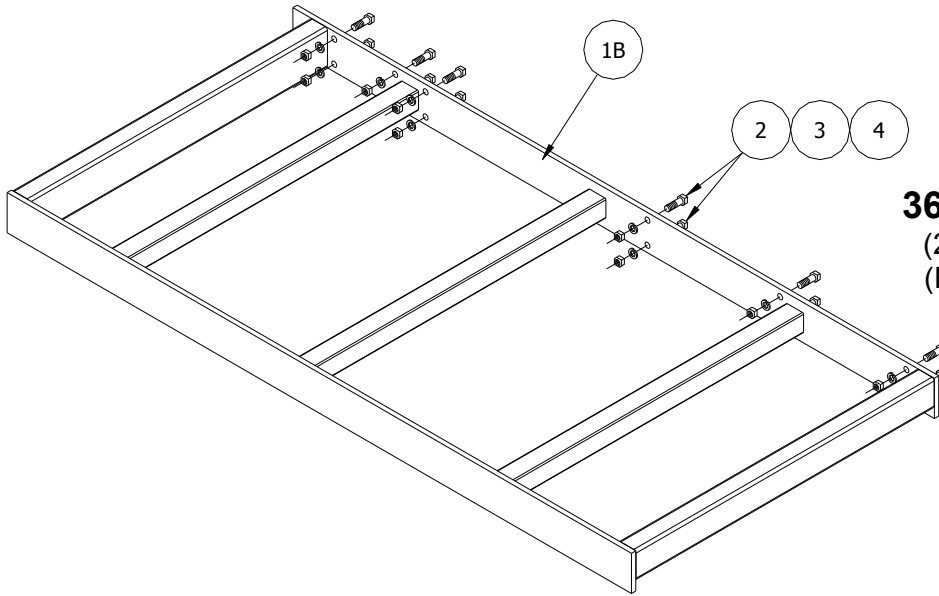


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-024		60" FOLDING WING, LT	1
2	21-080-025		60" FOLDING WING, RT	1

**LT & RT
16" WING EXTENSION**
(21-082-024 & 21-082-025)
(For 276" Folding Machine)



**LT & RT
36" WING EXTENSION**
(21-082-022 & 21-082-023)
(For 316" Folding Machine)



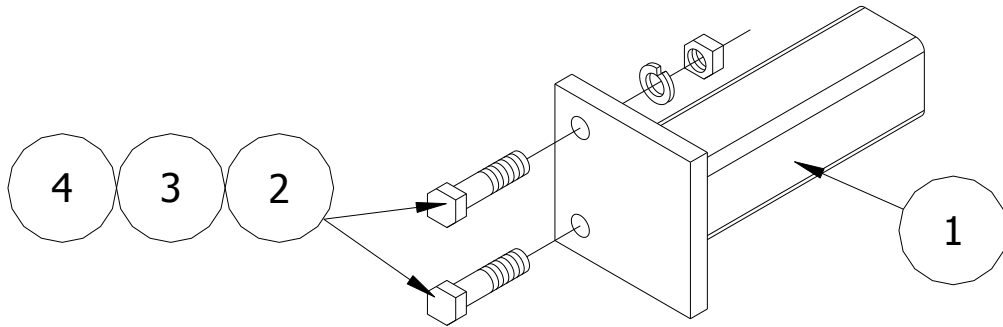
ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				LT	RT
1A	21-080-035		LT 16" WING EXTENSION (FOLDING)	1	-
	21-080-036		RT 16" WING EXTENSION (FOLDING)	-	1
2	48-090596		CAPSCREW, 1/2 X 1 3/4 G5 PLT	8	8
3	66-010250		LOCKWASHER, 1/2 PLT	8	8
4	68-010250		HEX NUT, 1/2 PLT	8	8

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				LT	RT
1B	21-080-033		LT 36" WING EXTENSION (FOLDING)	1	-
	21-080-034		RT 36" WING EXTENSION (FOLDING)	-	1
2	48-090596		CAPSCREW, 1/2 X 1 3/4 G5 PLT	12	12
3	66-010250		LOCKWASHER, 1/2 PLT	12	12
4	68-010250		HEX NUT, 1/2 PLT	12	12

SHANK BOLT-ON EXTENSION (FOLDING)

(21-082-052)

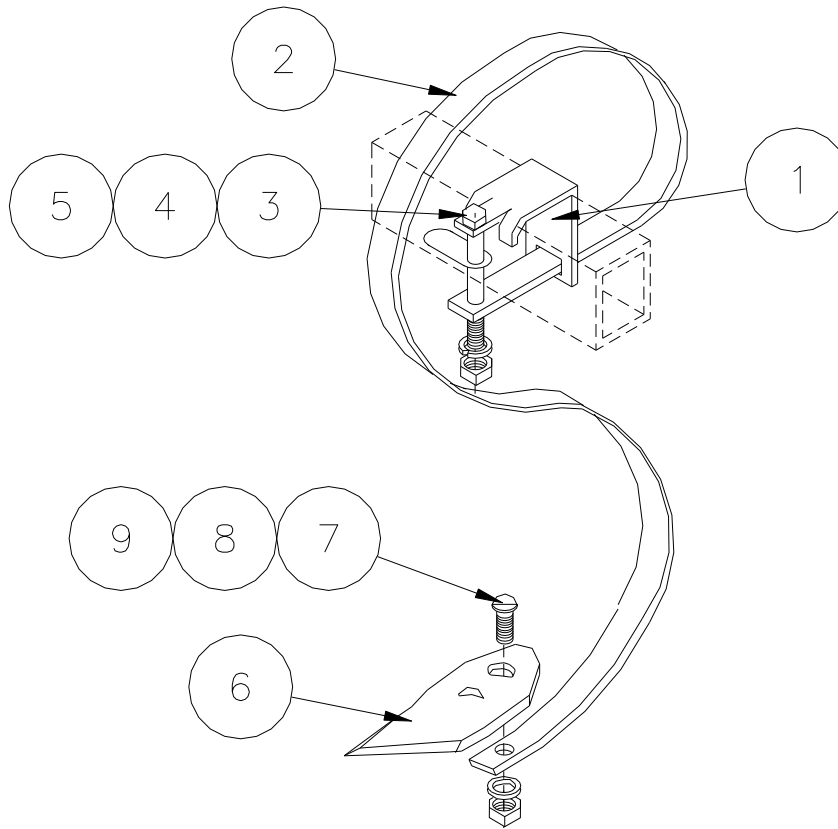
(For 260" Folding Machine)



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-058		SHANK EXTENSION	1
2	48-090596		CAPSCREW, 1/2 X 1 3/4 G5 PLT	2
3	66-010250		LOCKWASHER, 1/2 PLT	2
4	68-010250		HEX NUT, 1/2 PLT	2

COMPONENTS FOR ALL MACHINES

S-TINE BUNDLE



S-TINE BUNDLE W/2 1/2" SWEEP

(21-082-074) (2 X 2)

(21-082-073) (2 X 3)

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				2X2	2X3
1	04-023-296		"S" TINE CLAMP (2 X 2)	1	-
	21-023-001		"S" TINE CLAMP (2 X 3)	-	1
2	14-050-012		DANISH TINE	1	1
3	52-050275		CARRIAGE SCREW, 1/2 X 3 1/2 G5 P	1	-
	52-050325		CARRIAGE SCREW, 1/2 X 4 1/2 G5 P	-	1
4	66-010250		LOCKWASHER, 1/2 PLT	1	1
5	68-010250		HEX NUT, 1/2 PLT	1	1
6	04-057-045		2 1/2" TO 2 3/4" H.T. SWEEP	1	1
7	14-050-030		PLOW BOLT, 3/8 X 1 1/2 G8 PLT	1	1
8	17-050-003		FLATWASHER, 1/2	1	1
9	78-020300		FLANGE NUT, 3/8	1	1

S-TINE HEAVY DUTY BUNDLE W/2 1/2" SWEEP

(21-082-094) (2 X 2)

(21-082-095) (2 X 3)

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				2X2	2X3
1	21-023-104		"S" TINE CLAMP, 1/2" (2 X 2)	1	-
	21-023-103		"S" TINE CLAMP, 1/2" (2 X 3)	-	1
2	04-050-121		"S"-TINE, 1/2 X 1 1/4 HEAVY DUTY	1	1
3	52-050275		CARRIAGE SCREW, 1/2 X 3 1/2 G5 P	1	-
	52-090860		CAPSCREW, 1/2 X 4 1/2 G5 P	-	1
4	66-010250		LOCKWASHER, 1/2 PLT	1	1
5	68-010250		HEX NUT, 1/2 PLT	1	1
6	04-057-045		2 1/2" TO 2 3/4" H.T. SWEEP	1	1
7	14-050-030		PLOW BOLT, 3/8 X 1 1/2 G8 PLT	1	1
8	17-050-003		FLATWASHER, 1/2	1	1
9	78-020300		FLANGE NUT, 3/8	1	1

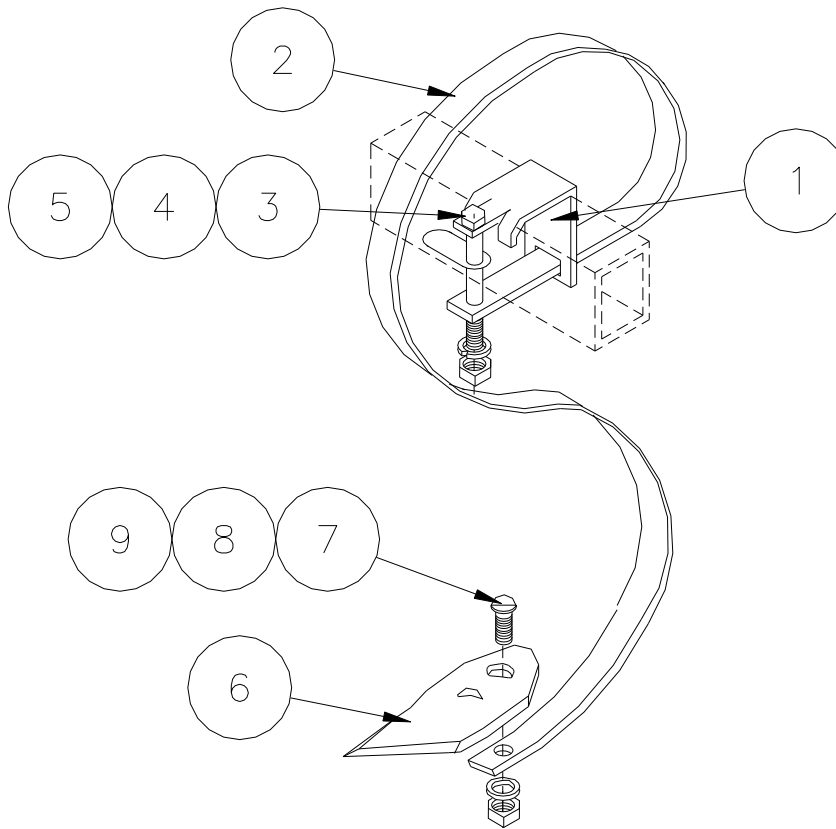
HIGH CLEARANCE S-TINE BUNDLE W/2 1/2" SWEEP (OPTIONAL)

(21-082-092) (2 X 2)

(21-082-093) (2 X 3)

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				2X2	2X3
1	21-023-104		"S" TINE CLAMP, 1/2" (2 X 2)	1	-
	21-023-103		"S" TINE CLAMP, 1/2" (2 X 3)	-	1
2	04-050-117		"S"-TINE, 1/2 X 1 1/4 HIGH CLEAR.	1	1
3	52-050275		CARRIAGE SCREW, 1/2 X 3 1/2 G5 P	1	-
	52-090860		CAPSCREW, 1/2 X 4 1/2 G5 P	-	1
4	66-010250		LOCKWASHER, 1/2 PLT	1	1
5	68-010250		HEX NUT, 1/2 PLT	1	1
6	04-057-045		2 1/2" TO 2 3/4" H.T. SWEEP	1	1
7	14-050-030		PLOW BOLT, 3/8 X 1 1/2 G8 PLT	1	1
8	17-050-003		FLATWASHER, 1/2	1	1
9	78-020300		FLANGE NUT, 3/8	1	1

S-TINE BUNDLE
(For Mini Field Cultivators)



S-TINE BUNDLE W/SWEEP

(21-082-111) (2 X 2)

(21-082-112) (2 X 3)

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				2X2	2X3
1	04-023-296		"S" TINE CLAMP (2 X 2)	1	-
	21-023-001		"S" TINE CLAMP (2 X 3)	-	1
2	14-050-012		DANISH TINE	1	1
3	52-050275		CARRIAGE SCREW, 1/2 X 3 1/2 G5 P	1	-
	52-050325		CARRIAGE SCREW, 1/2 X 4 1/2 G5 P	-	1
4	66-010250		LOCKWASHER, 1/2 PLT	1	1
5	68-010250		HEX NUT, 1/2 PLT	1	1
6	04-057-046		SWEEP, 4" S-TINE	1	1
7	14-050-030		PLOW BOLT, 3/8 X 1 1/2 G8 PLT	1	1
8	17-050-003		FLATWASHER, 1/2	1	1
9	78-020300		FLANGE NUT, 3/8	1	1

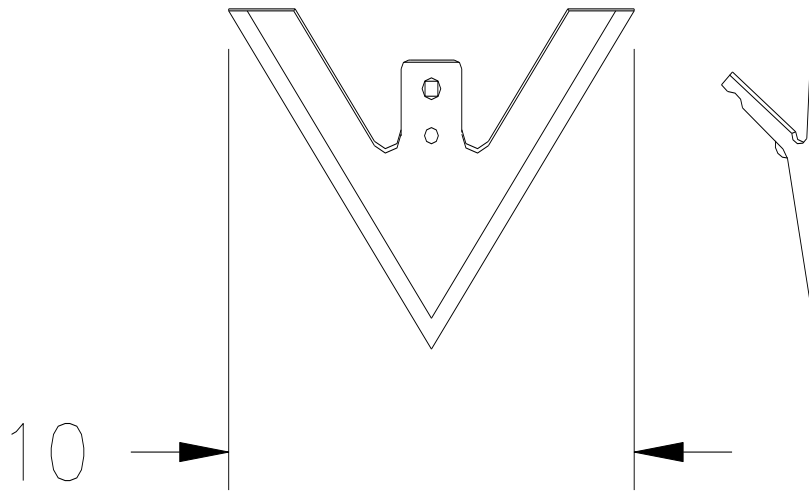
HI CLEARANCE S-TINE BUNDLE W/ NO SWEEP

(21-082-043) (2 X 2) (For Mini Skip-Row)

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	04-050-117		"S" TINE, 1/2 X 1 14	1
2	21-023-104		CLAMP, 2 X 2 HI CLEARANCE	1
3	52-050275		CARRIAGE SCREW, 1/2 X 3 1/2 G5 P	1
4	66-010250		LOCKWASHER, 1/2 PLT	1
5	68-010250		HEX NUT, 1/2 PLT	1

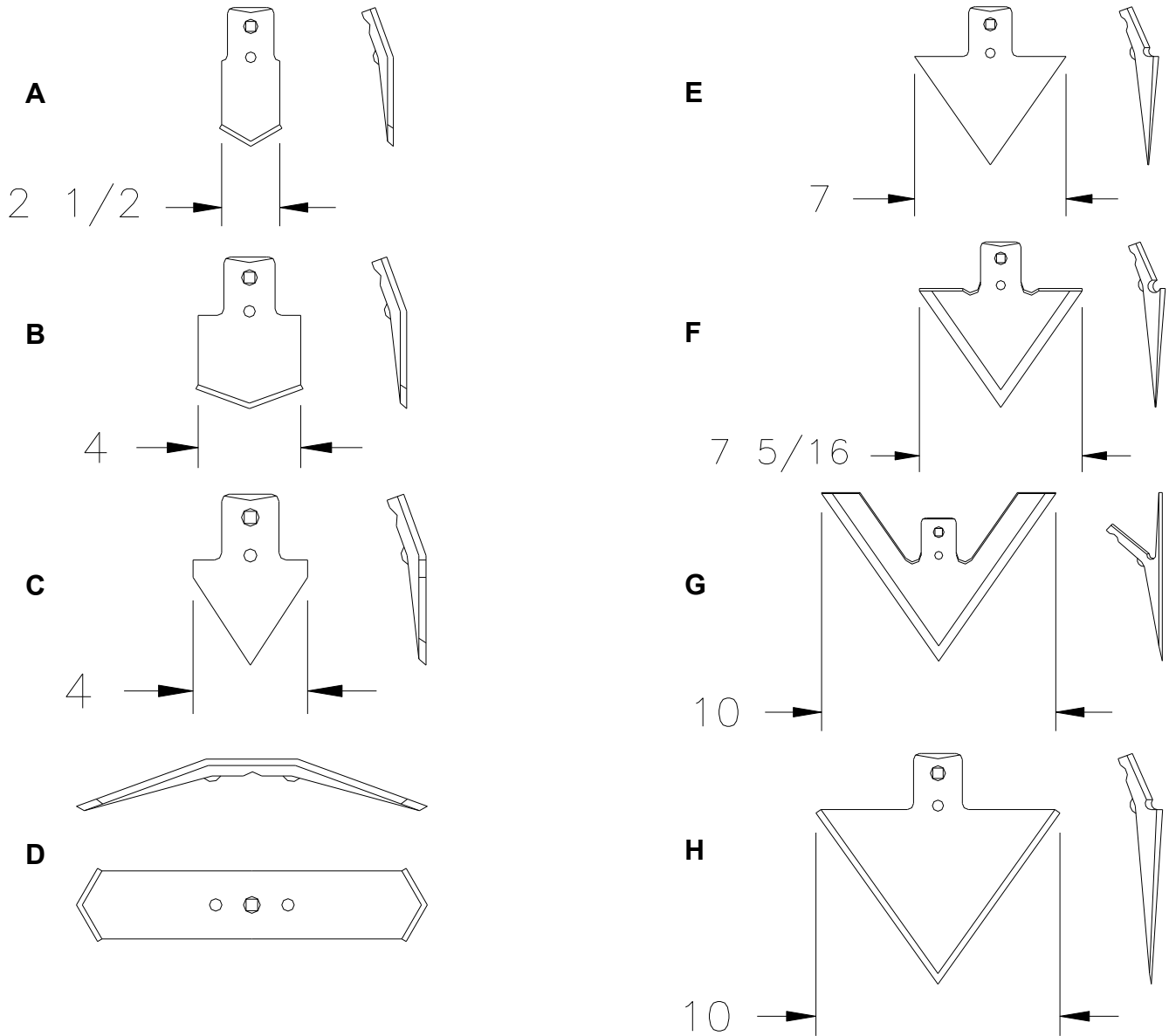
10" WINGED SWEEP W/HARDWARE

(21-082-091)



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	04-057-063		SWEEP, 10" WING	1
2	14-050-030		PLOW BOLT, 3/8 X 1 1/2 G8 PLT	1
3	78-020300		FLANGE NUT, 3/8	1
4	17-050-003		FLATWASHER, 1/2 HARDEN	1

SWEEPS

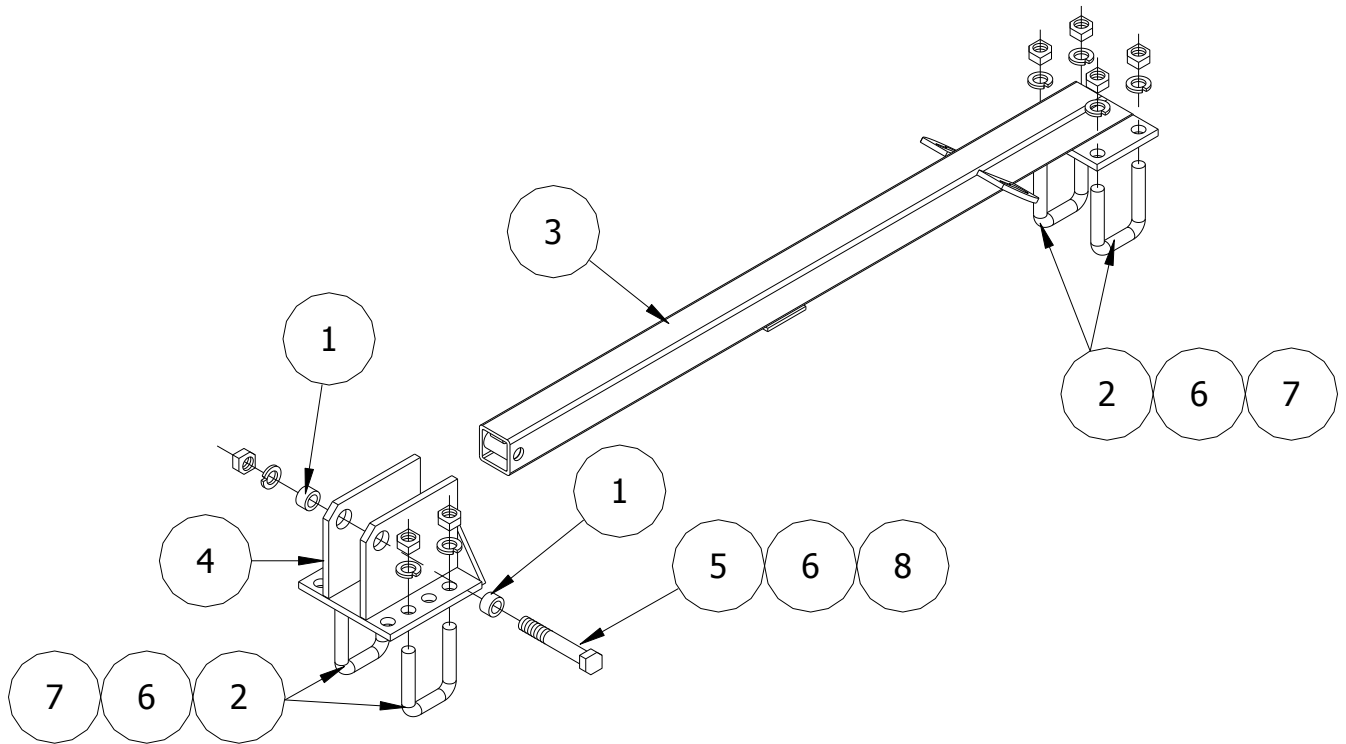


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
A	04-057-045		SWEEP, 2 1/2" TO 2 3/4"	
B	04-057-046		SWEEP, 4" (1/4")	
C	04-057-060		SWEEP, 4" WINGED "S"-TINE (1/4")	
D	04-057-048		REVERSIABLE SPIKE	
E	04-057-049		SWEEP, 7" (1/4")	
F	04-057-062		SWEEP, 7" WINGED "S"-TINE (1/4")	
G	04-057-063		SWEEP, 10" WINGED "S"-TINE (1/4")	
H	04-057-047		SWEEP, 10"	

CRUMBLER REACH

(21-082-055)

(For Mini Field Cultivator)

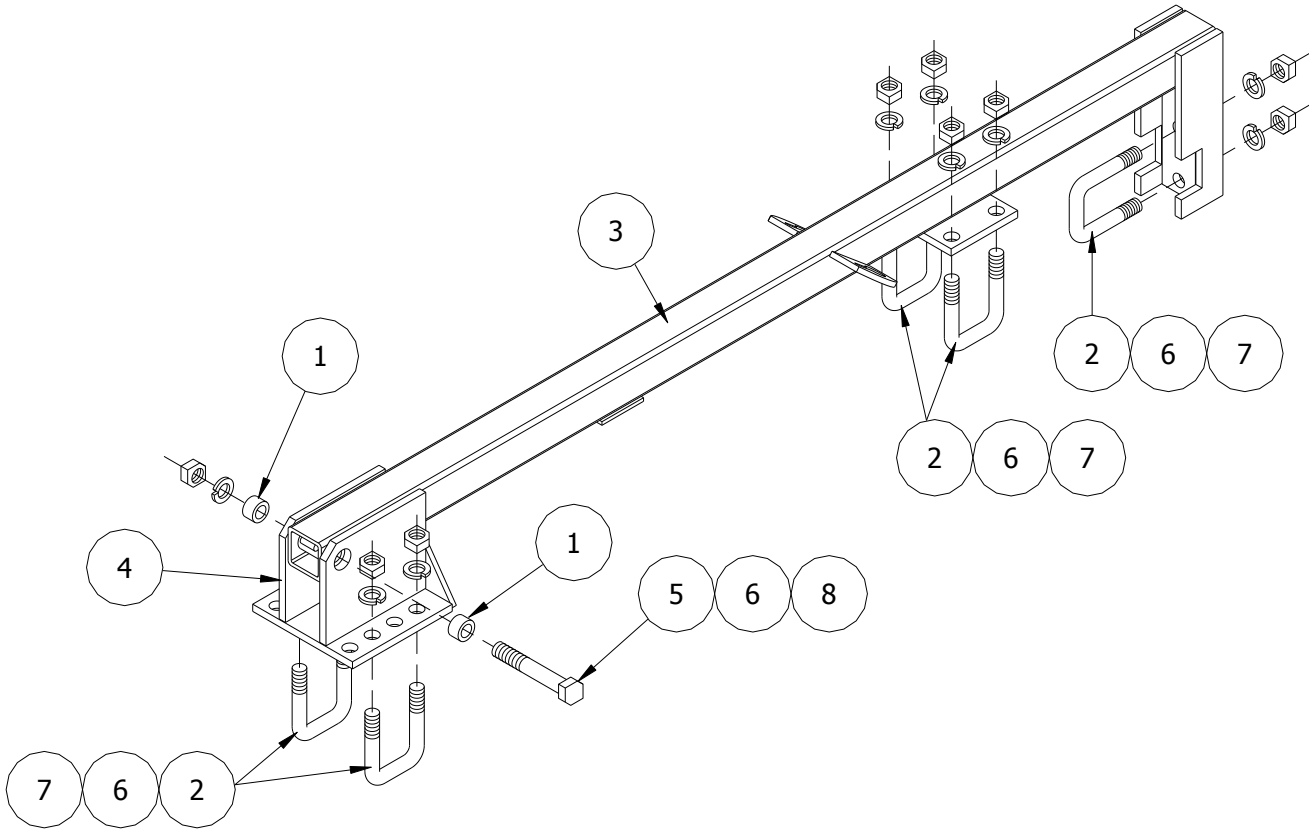


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	04-024-001		PIVOT BUSHING	2
2	21-050-001		U-BOLT, 5/8 X 2 11/16 X 3 5/16	4
3	21-080-071		CRUMBLER REACH WELDMENT	1
4	21-080-015		FRONT PIVOT BRACKET	1
5	48-091075		CAPSCREW, 5/8 X 2 11/16 X 3 5/16	1
6	66-010300		LOCKWASHER, 5/8	9
7	68-010300		HEX NUT, 5/8	8
8	72-020050		LOCKNUT, 5/8 G"C" PL	1

CRUMBLER REACH ASSEMBLY

(21-082-083)

(For Mini Skip-Row Field Culticators)

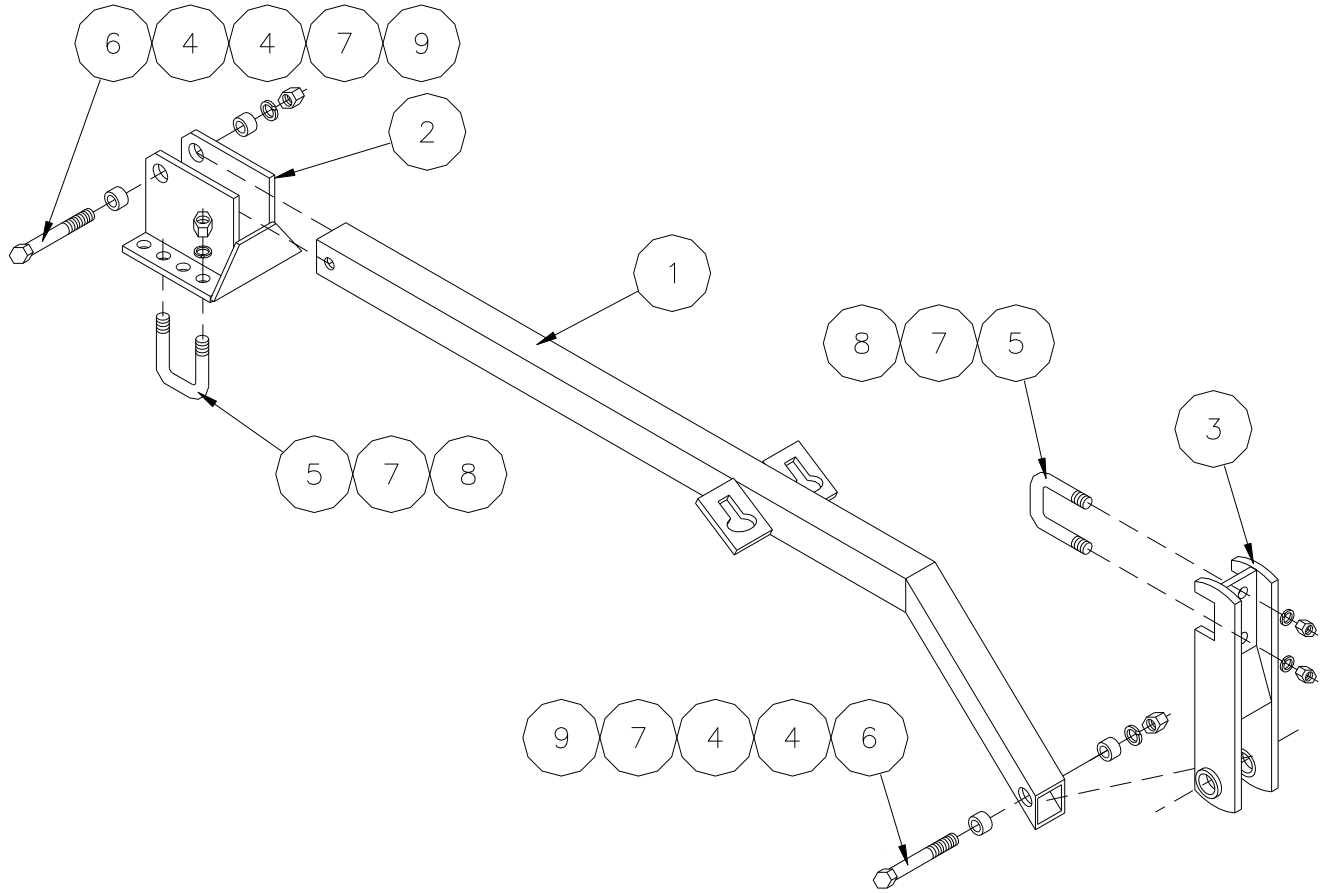


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	04-024-001		PIVOT BUSHING	2
2	21-050-001		U-BOLT, 5/8 X 2 11/16 X 3 5/16	4
3	21-080-098		CRUMBLER REACH WELDMENT	1
4	21-080-015		FRONT PIVOT BRACKET	1
5	48-091075		CAPSCREW, 5/8 X 2 11/16 X 3 5/16	1
6	66-010300		LOCKWASHER, 5/8	11
7	68-010300		HEX NUT, 5/8	10
8	72-020050		LOCKNUT, 5/8 G"C" PL	1

SINGLE CRUMBLER MOUNTING BUNDLE

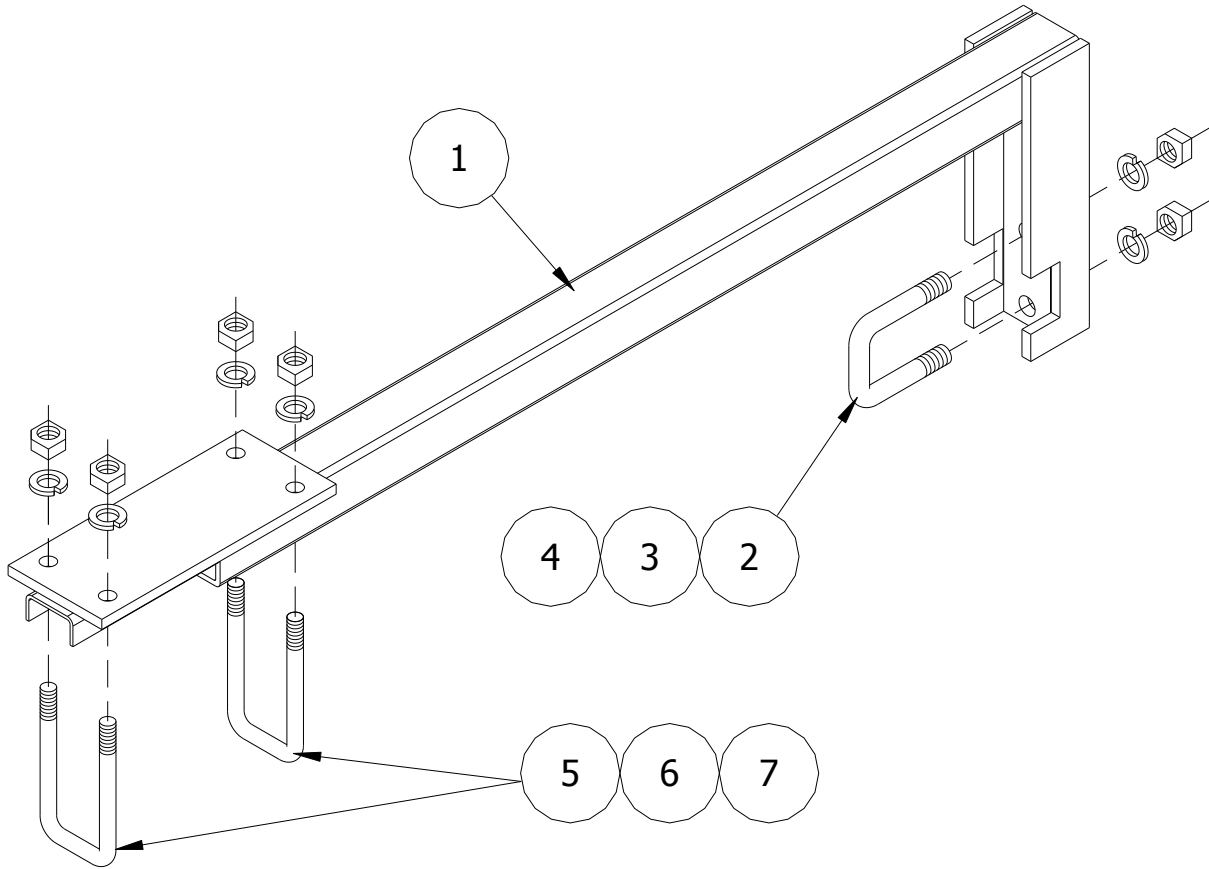
(For All Models)
(21-082-042)

(OPTIONAL)
(High Clearance)
(21-082-076)



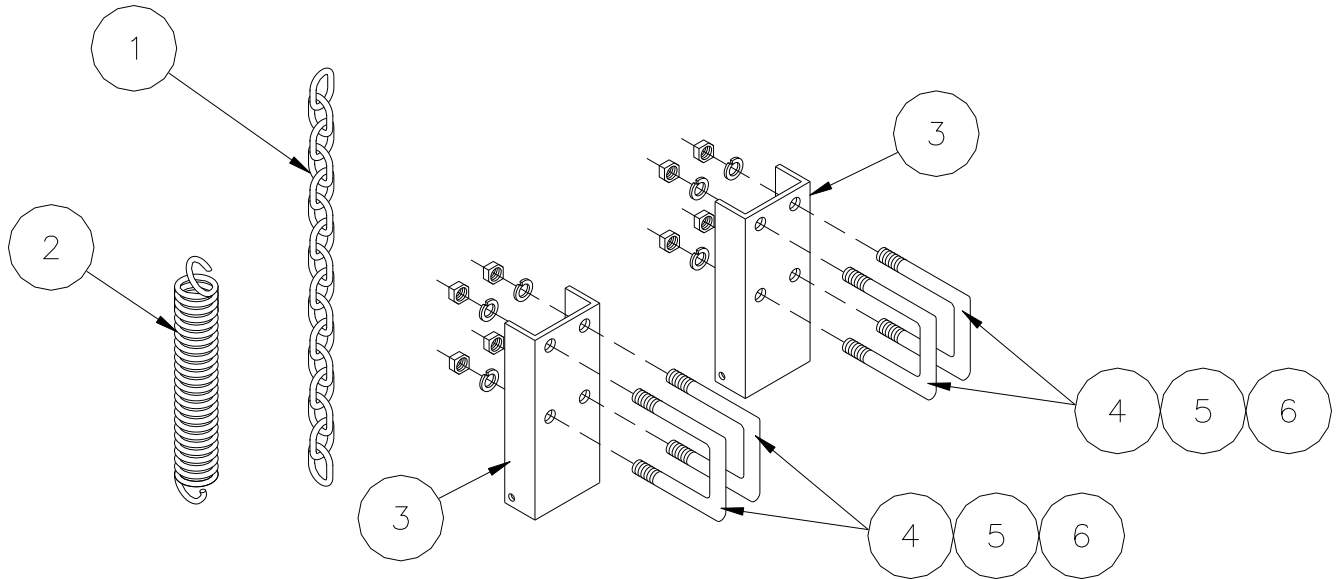
ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				-042	-076
1A	21-080-008		PIVOT BEAM	1	-
	21-080-088		H.C. PIVOT BEAM	-	1
2	21-080-015		FRONT PIVOT BRACKET	1	1
3	21-080-014		CRUMBLER MOUNTING BRACKET	1	1
4	04-024-001		PIVOT BUSHING, 9/16	4	4
5	21-050-001		U-BOLT, 5/8 X 2 11/16 X 3 5/16	3	3
6	48-091075		CAPSCREW, 5/8 X 2 11/16 X 3 5/16	3	3
7	66-010300		LOCKWASHER, 5/8	8	8
8	68-010300		HEX NUT, 5/8	6	6
9	72-020050		LOCKNUT, 5/8 G"C" PL	2	2

**REACH EXTENSION
(OPTIONAL)
(21-082-090)**



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-102		REACH EXTENSION	1
2	21-050-001		U-BOLT, 5/8 X 2 11/16 X 3 5/16	1
3	66-010300		LOCKWASHER, 5/8	2
4	68-010300		HEX NUT, 5/8	2
5	04-050-087		U-BOLT, 1/2 X 2 17/32 X 4	2
6	66-010250		LOCKWASHER, 1/2 PLT	4
7	68-010250		HEX NUT, 1/2 PLT	4

**H.D. SPRING SUPPORT
(For All Models)
(21-082-067)**



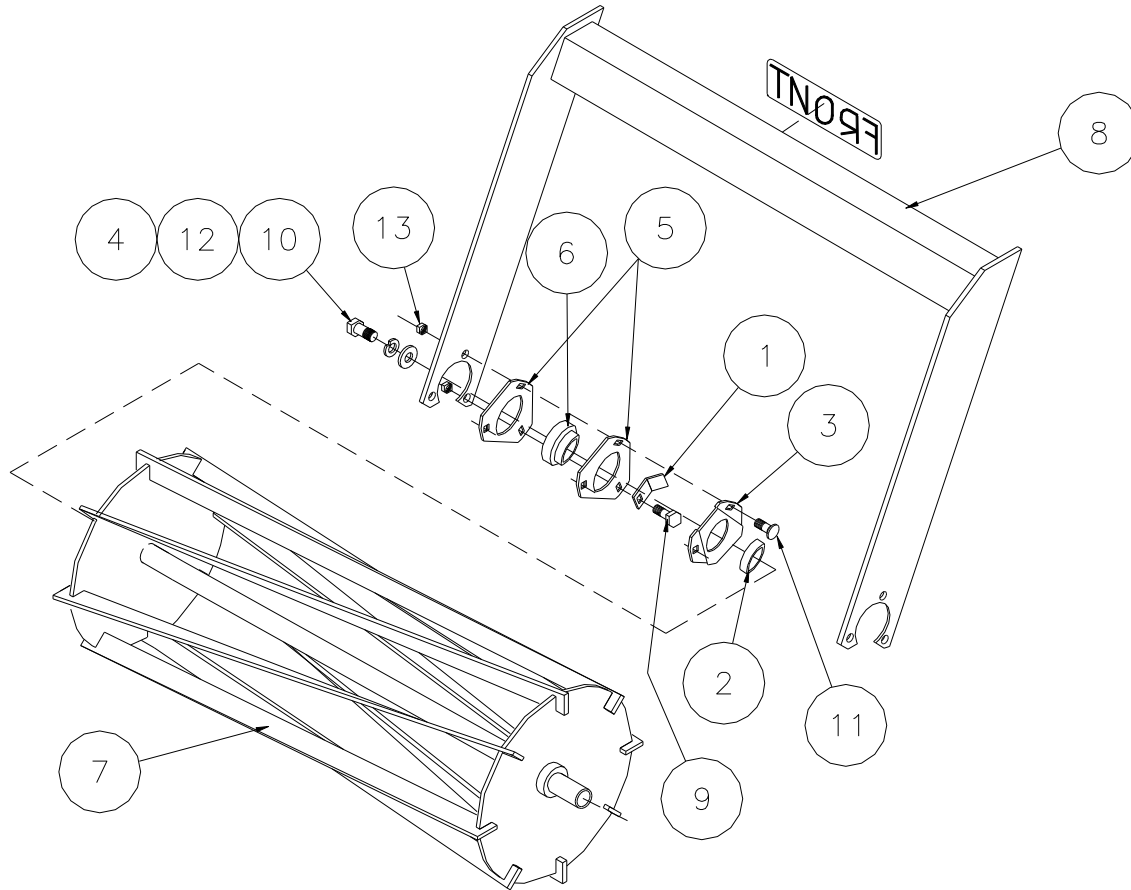
ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	03-050-003		3/16 PROOF CHAIN - 26 LINKS	2
2	21-050-016		SPRING. 1.56 X 9.5 EXT.	4
3	21-027-001		TENSION SPRING BRACKET	2
4	21-050-002		"U"-BOLT	4
5	66-010250		LOCKWASHER, 1/2 PLT	8
6	68-010250		HEX NUT, 1/2 PLT	8

SINGLE CRUMBLER ASSEMBLY

(21-082-059) (56")

(21-082-080) (74")

(21-082-060) (82")

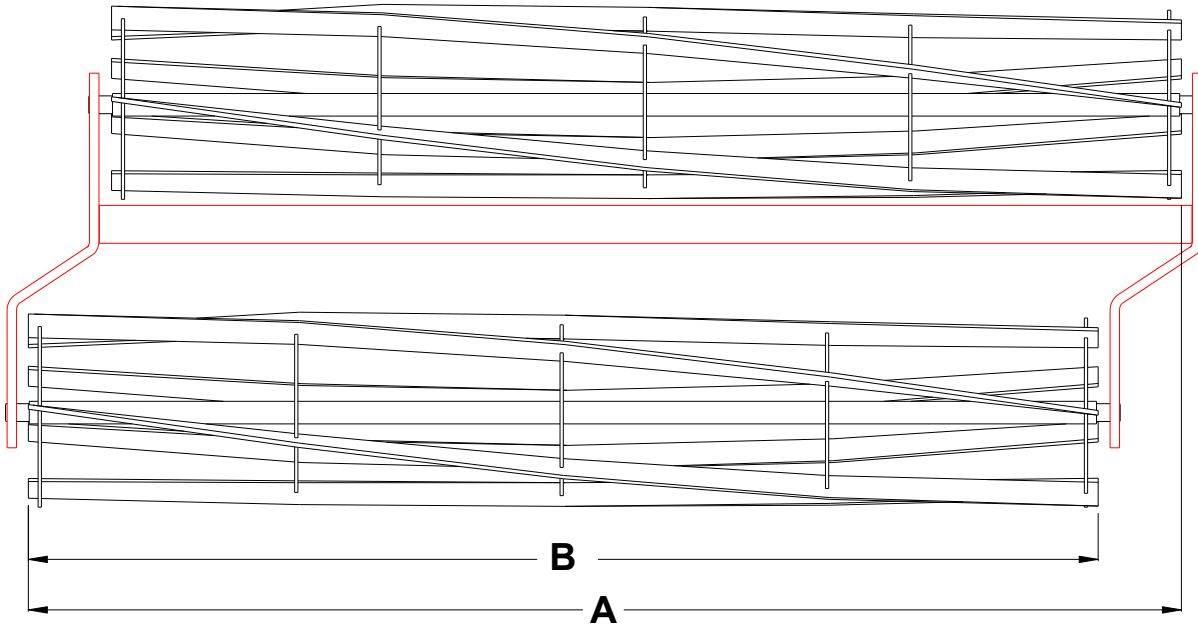


ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY		
				56"	74"	82"
1	21-023-116		CRUMBLER SCRAPER	2	2	2
2	21-024-056		TRASH SPACER	2	2	2
3	21-027-006		SEAL GUARD	2	2	2
4	04-050-013		1 5/16" WASHER H.T.	2	2	2
5	03-051-012		#52 MSTR FLANGETTE	4	4	4
6	04-051-001		5/16" TRI-PLY	2	2	2
7	21-080-053		56-5/8" CRUMBLER WELDMENT	1	-	-
	21-080-063		74-3/32" CRUMBLER WELDMENT	-	1	-
	21-080-060		81-29/32" CRUMBLER WELDMENT	-	-	1
8	21-080-072		56" SINGLE CRUMBLER	1	-	-
	21-080-096		74" SINGLE CRUMBLER	-	1	-
	21-080-073		82" SINGLE CRUMBLER	-	-	1

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY		
				56"	74"	82"
9	48-090037		CAPSCREW, 5/16 X 1 1/4 G5 PLT	2	2	2
10	48-090930		CAPSCREW, 5/8 X 1 1/2 G5 PLT	2	2	2
11	52-050010		CARRIAGE BOLT, 5/16 X 1 G5 PLT	2	2	2
12	66-010300		LOCKWASHER, 5/8 PLT	2	2	2
13	79-020049		LOCKNUT, 5/16 FLANGE WHIZ	6	6	6

S-TINE FIELD CULTIVATOR CRUMBLER I.D. CHART

Information to assist in identifying crumbler sections and crumbler reels for KMC Field Cultivators.



TANDEM CRUMBLER ASSEMBLY	A
21-082-040	42-1/8"
21-082-041	62-1/8"
21-082-048	79-9/16"
21-082-049	87-3/8"
21-082-077	93-3/8"

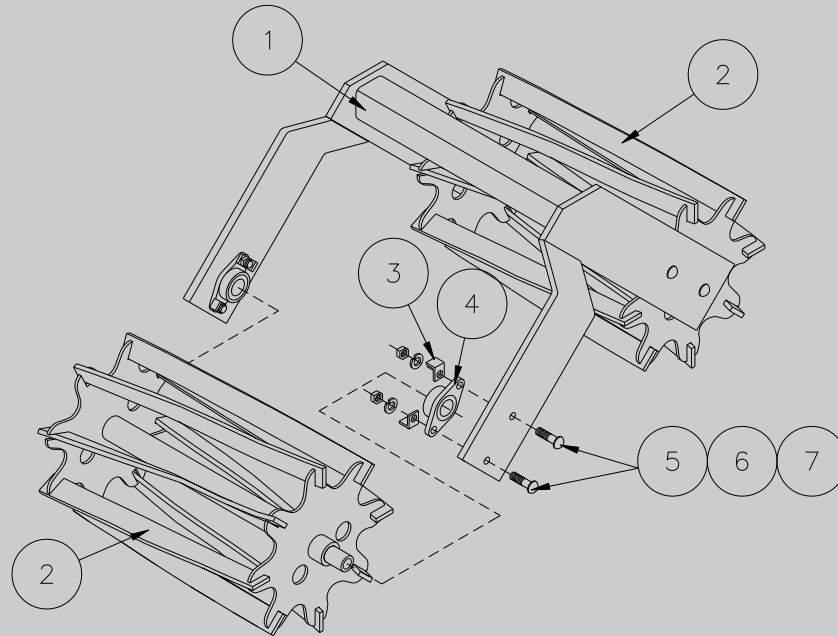
SINGLE REEL WELDMENT	B
21-080-052	36-5/8"
21-080-053	58-5/8"
21-080-063	74-3/32"
21-080-060	81-29/32"
21-080-092	87-29/32"

PLEASE NOTE: THE ABOVE MEASUREMENTS ARE FROM THE TIP OF THE CRUMBLER BLADE IN A STRAIGHT LINE TO THE TIP OF THE BLADE AT THE OTHER END. DO NOT FOLLOW

CRUMBLER ASSEMBLY (For Machines Prior to 1986)

(21-082-010)
(21-082-011)

(40")
(60")



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				40"	60"
1	21-080-020	(-1985)	40" FRAME WELDMENT	(1)	-
	21-080-021	(-1985)	60" FRAME WELDMENT	-	(1)
2	21-050-006	(1984)	40" CRUMBLER REEL	(2)	-
	21-080-017	(1995)	40" CRUMBLER WELDMENT	(2)	-
	21-050-007	(1984)	60" CRUMBLER REEL	-	(2)
	21-080-018	(1995)	40" CRUMBLER WELDMENT	-	(2)
3	21-023-054	(-1985)	CRUMBLER SCRAPER	(4)	(4)
4	21-051-001	(1984)	2H CAST BEARING UNIT, 15/16"	(4)	(4)
	21-051-004	(1995)	2H CAST BEARING UNIT, 1"	(4)	(4)
	21-051-002	(1984)	205 TRI-PLY BEARING UNIT, 15/16"	(4)	(4)
	21-051-005	(1995)	205 TRI-PLY BEARING UNIT, 1"	(4)	(4)
	21-051-003	(-1985)	CAST BEARING HOUSING	(4)	(4)
5	60-020075	(-1985)	PLOW BOLT, 7/16 X 1 3/4	(8)	(8)
6	66-010200	(-1985)	LOCKWASHER, 7/16	(8)	(8)
7	68-010200	(-1985)	HEX NUT, 7/16	(8)	(8)

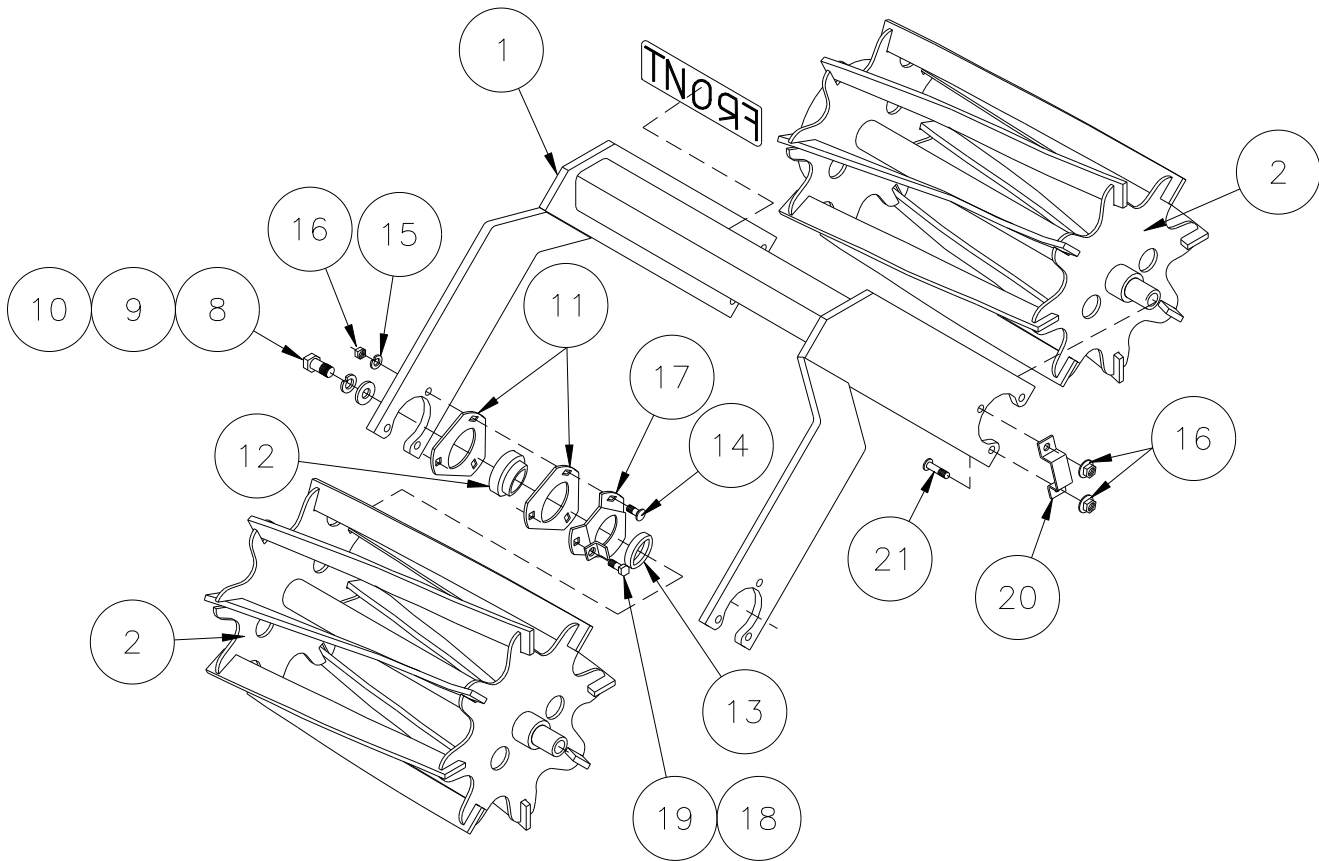
* How to Identify Crumblers (Item 2)
Crumblers used in 1984 contained 1" slats.
Crumblers used in 1985 contained 1 1/4" slats.

CRUMBLER ASSEMBLY

(For Machines From 1986 to Present)

(21-082-040) (42")

(21-082-041) (62")



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				42"	62"
1	21-080-048		42" FRAME WELDMENT	1	-
	21-080-049		62" FRAME WELDMENT	-	1
2	21-050-052		36-5/8" CRUMBLER WELDMENT	2	-
	21-080-053		56-5/8" CRUMBLER WELDMENT	-	2
3	21-023-054		CRUMBLER SCRAPER	4	4
8	48-090930		CAPSCREW, 5/8 X 1 1/2 G5 PLT	4	4
9	66-010300		LOCKWASHER, 5/8	4	4
10	04-050-013		WASHER, 1 5/16 H.T.	4	4
11	03-051-012		FLANGETTE, NO 52 MSTR	8	8
12	04-051-001		BEARING, 15/16 TRI-PLY	4	4
13	21-024-056		TRASH SPACER	4	4
14	52-030150		CARRIAGE SCREW, 5/16 X 1 G2 PLT	4	4

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY	
				42"	62"
15	66-010100	(1986-1989)	LOCKWASHER, 5/16 PLT	(12)	(12)
16	72-010025	(1986-1989)	LOCKNUT, 5/16 PLT	(12)	(12)
	79-020049	(1990-)	FLANGE WHIZ LOCKNUT, 5/16 PLT	12	12
17	21-027-006		SEAL GUARD	4	4
18	21-023-116	(1987-)	CRUMBLER SCRAPER	4	4
19	48-040066	(1987-)	CAPSCREW, 5/16 X 1 1/4 G2 PLT	4	4
20	21-023-136	(1990-)	BOLT COVER	2	2
21	52-030160	(1990-)	CARRIAGE BOLT, 5/16 X 1 1/4 G2 PLT	4	4

* How to Identify Crumblers (Item 2)

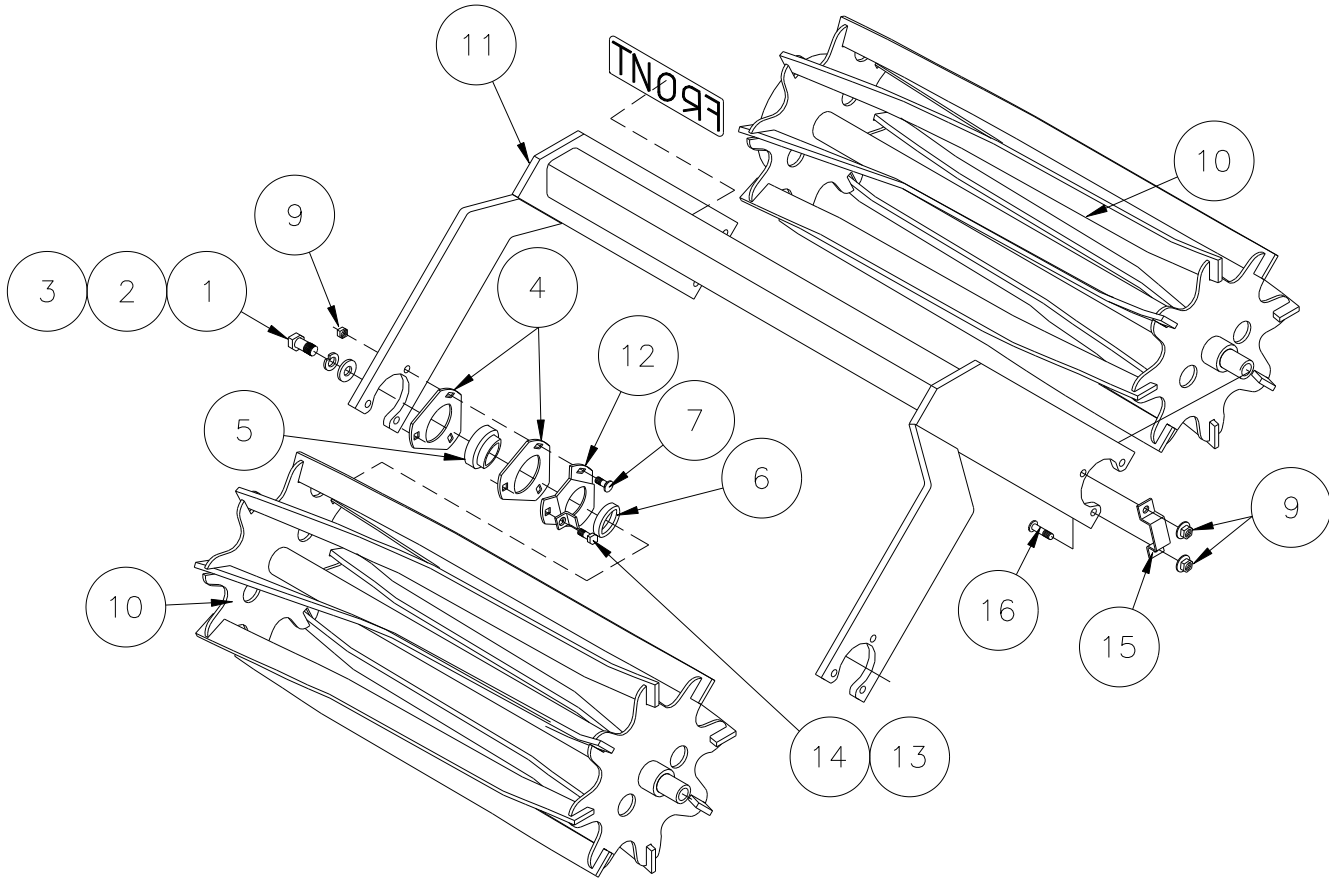
Crumblers used from 1986 contained 1 1/4" slats and flangettes (Item 11).

CRUMBLER ASSEMBLY

(21-082-048) (80")

(21-082-049) (87")

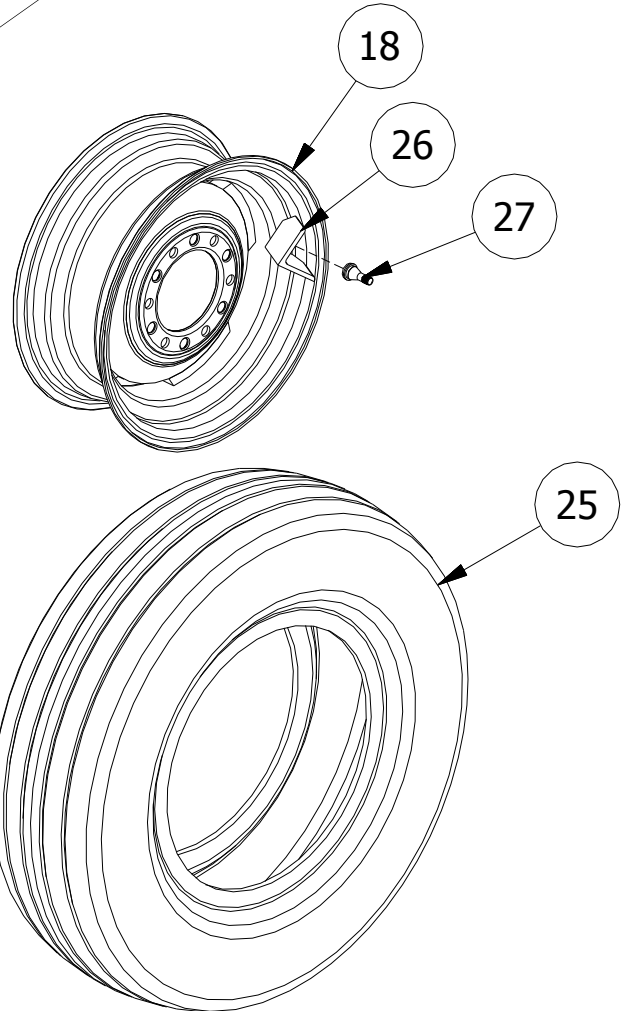
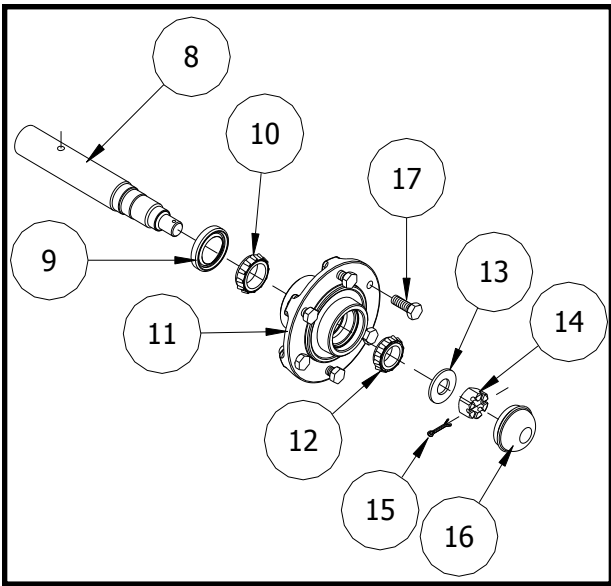
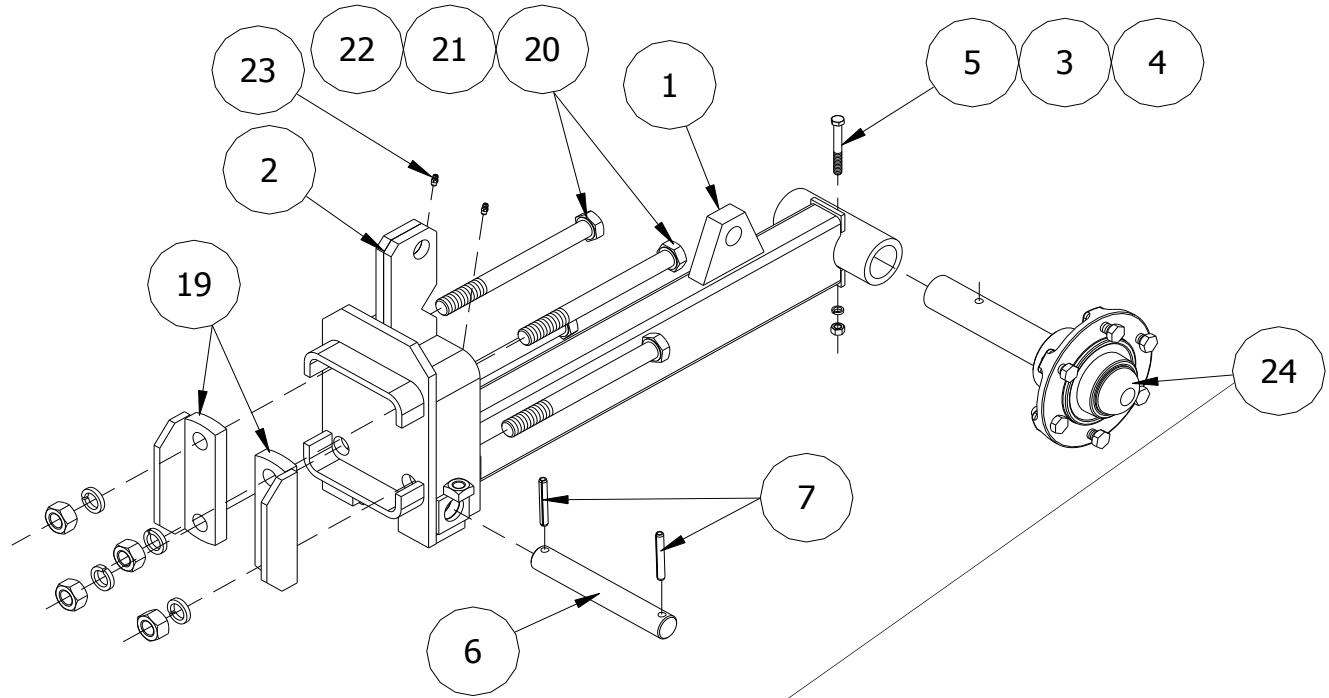
(21-082-077) (93")



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY		
				80"	87"	93"
1	48-090930		CAPSCREW, 5/8 X 1 1/2	4	4	4
2	66-010300		LOCKWASHER, 5/8 PTL	4	4	4
3	04-050-013		WASHER, 1 5/16 H.T.	4	4	4
4	03-051-012		FLANGETTE, #52 MSTR	8	8	8
5	04-051-001		BEARING, 15/16" TRI-PLY	4	4	4
6	21-024-056		TRASH SPACER	4	4	4
7	52-030150		CARRIAG SCREW, 5/16 X 1 G2 PLT	4	4	4
8	66-10100	(-1989)	LOCKWASHER, 5/16	(12)	(12)	(12)
9	68-010100	(-1989)	HEX NUT, 5/16	(12)	(12)	(12)
	79-020049	(1990-)	LOCKNUT, 5/16 FLANGE WHIZ	12	12	12
10	21-080-063		74-3/32" CRUMBLER WELDMENT	1	-	-
	21-080-060		81-29/32" CRUMBLER WELDMENT	-	1	-
	21-080-092		87-29/32" CRUMBLER WELDMENT	-	-	1

ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY		
				80"	87"	93"
11	21-080-064		80" CRUMBLER FRAME WELDMENT	1	-	-
	21-080-061		87" CRUMBLER FRAME WELDMENT	-	1	-
	21-080-091		93" CRUMBLER FRAME WELDMENT	-	-	1
12	21-027-006		SEAL GUARD	4	4	4
13	21-023-116		CRUMBLER SCRAPER	4	4	4
14	48-040066		CAPSCREW, 5/16 X 1 1/4 G2 PLT	4	4	4
15	21-023-136		BOLT COVER	1	1	1
16	52-030160		CARRIAGE BOLT, 5/16 X 1 1/4 G2 PLT	4	4	4

GAUGE WHEEL
(21-082-039)
(For Rigid & Folding Pull-Type)



ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-046		GAUGE WHEEL ARM	1
2	21-080-045		GAUGE WHEEL BRACKET	1
3	66-010150		LOCKWASHER, 3/8 PLT	1
4	68-010150		HEX NUT, 3/8 PLT	1
5	48-090250		CAPSCREW, 3/8 X 3 G5 PLT	1
6	21-026-010		WHEEL PIVOT PIN	1
7	02-050-003		ROLL PIN, 3/8 X 2 3/4	2
√8	21-026-013	SEE NOTE	Q-888 SPINDLE 12" W/HOLE	1
√9	02-056-011		SEAL (16284 CR)	1
√10	02-051-041		INNER BEARING (JL69349)	1
√11	02-058-033		Q-888 HUB W/CUPS	1
	02-051-005		CUPS	1
	02-051-040		CUPS	1
√12	02-051-006		OUTER BEARING (LM67048)	1
√13	02-050-019		WASHER, 15/16 ID X 2 OD X .160 THK	1
√14	68-030050		SLOTTED NUT, 7/8 NF HEX	1
√15	76-010050		COTTER PIN, 5/32 X 1 1/4	1
√16	02-058-005		HUB CAP	1
√17	02-058-004		WHEEL BOLT, 1/2 X 1 NF -20	1
*18	02-058-008		WHEEL (RIM) 15 X 6	1
19	06-080-054		LIFT ASSIST T.B. CAP	2
20	48-100400		CAPSCREW, 7/8 X 9 1/2 G5 PLT	4
21	66-010400		LOCKWASHER, 7/8 PLT	4
22	68-010400		HEX NUT, 7/8 PLT	4
23	02-050-005		GREASE FITTING, 1/4-28	1
24	21-081-003		ASSEMBLY, Q-888 12" SPINDLE	1

*Sold Separately From Bundle.

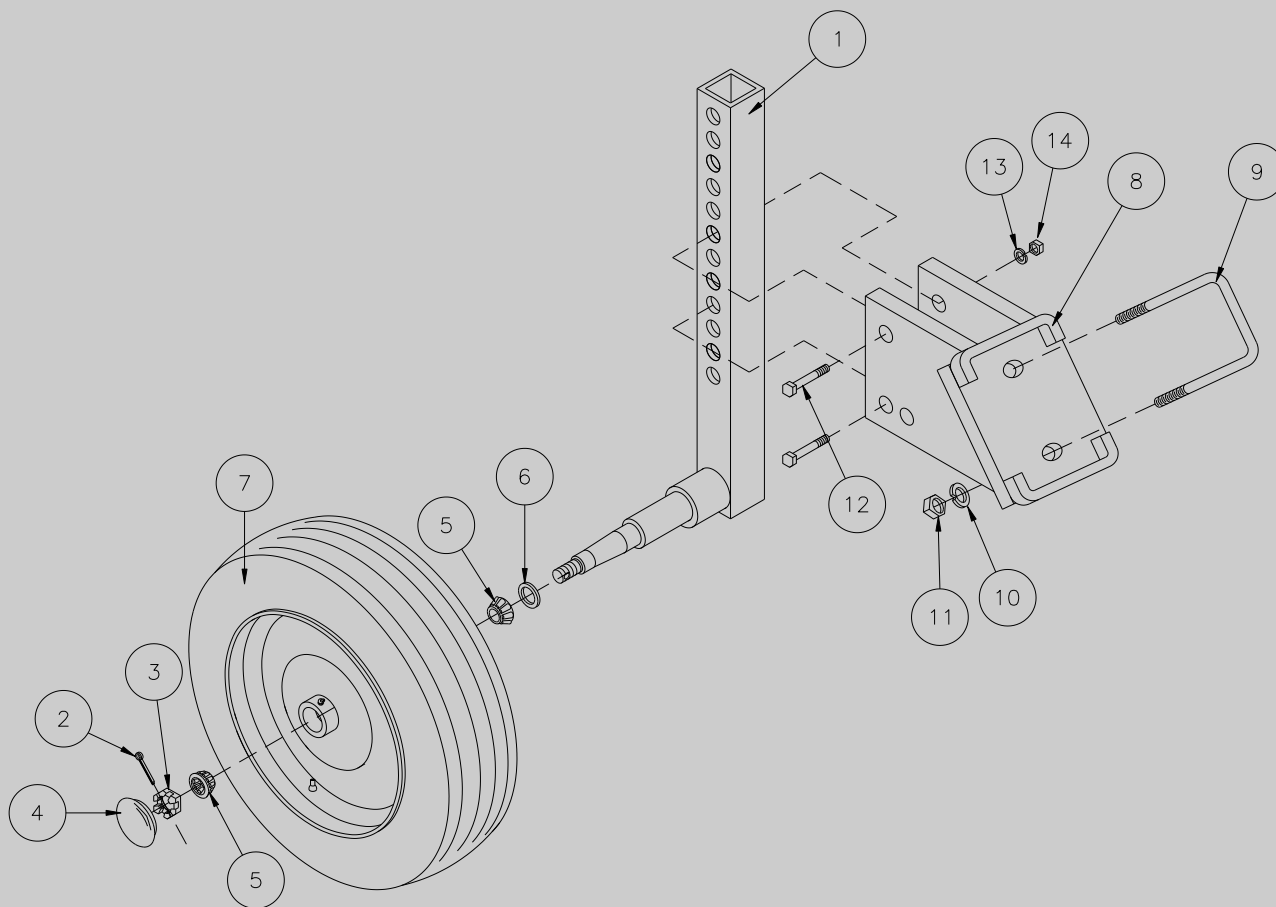
√ Items Make Up Item 24 (21-081-003)

NOTE: Item 8 (21-026-013) replaces (02-058-041) on machines prior to fall of 1987.

15 x 6 RIM W/TIRE
(21-082-128)

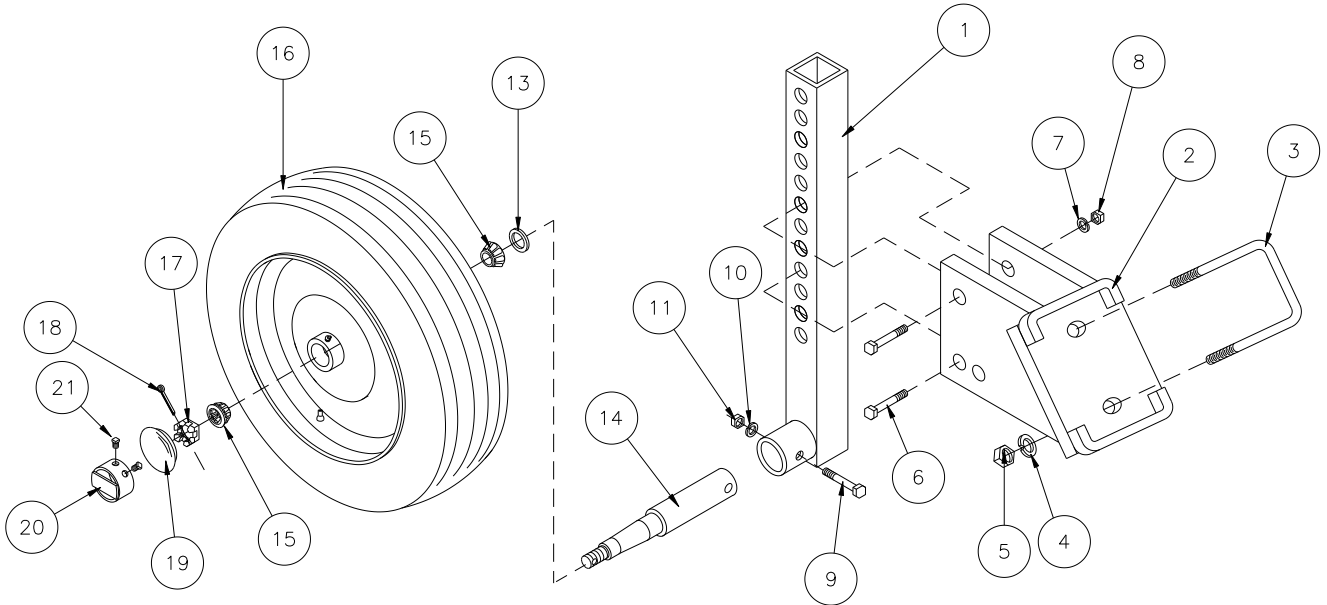
ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
25	21-058-011		TIRE, 7.60 -15SL	1
26	21-058-009		WHEEL, 15 X 6 W/PROTECTOR	1
27	18-050-021		STEM, VALVE	1

5 X 8 GAUGE WHEEL (2 X 4)
 (21-082-012)
 (USED ON MACHINE PRIOR TO 1988)



ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-011	(-1985)	GAUGE WHEEL ARM	
	21-080-054	(1986-1987)	GAUGE WHEEL ARM, 1"-14	1
2	76-010100		COTTER PIN, 3/16 X 1 1/2	1
3	68-030101		SLOTTED NUT, 1-14 N.F. THIN HEX , PLN	1
4	21-058-001		GREASE CAP, SHORT	1
5	02-051-015		BEARING CONE (L44643)	2
6	02-056-007		SEAL (NAT. 204029X)	1
7	03-058-006		TUBELESS TIRE WWHEEL, 5.70	1
8	21-080-010		BRACKET, GAUGE WHEEL	1
9	05-050-003		"U"-BOLT, 5/8 X 4 11/16 X 3 3/8	1
10	66-010300		LOCKWASHER, 5/8	2
11	68-010300		HEX NUT, 5/8 PLT	2
12	48-090750		CAPSCREW, 1/2 X 3 1/2 G5 PLT	2
13	66-010250		LOCKWASHER, 1/2 PLT	2
14	68-010250		HEX NUT, 1/2 PLT	2

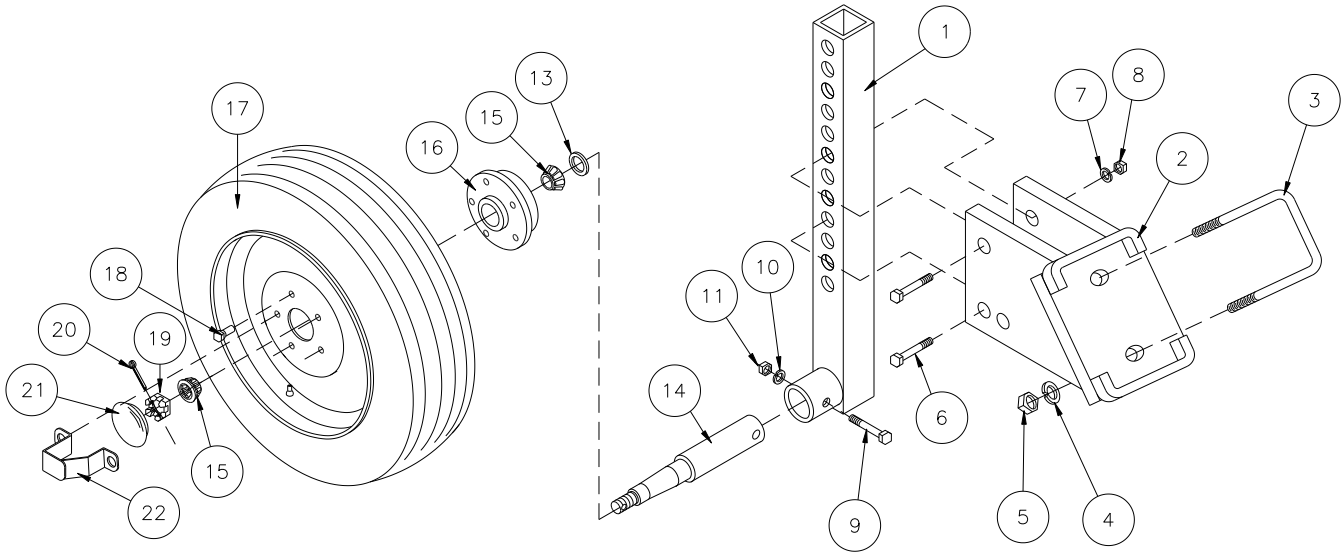
8 X 8 GAUGE WHEEL (2 X 4)
 (21-082-068)
 (USED ON MACHINE FROM 1988 TO PRESENT)



ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-080		GAUGE WHEEL ARM	1
2	21-080-010		BRACKET, GAUGE WHEEL	1
3	05-050-003		"U"-BOLT, 5/8 X 4 11/16 X 3 3/8	1
4	66-010300		LOCKWASHER, 5/8 REG PLT	2
5	68-010300		HEX NUT, 5/8 PLT	2
6	48-090750		CAPSCREW, 1/2 X 2 1/2 G5 PLT	2
7	66-010250		LOCKWASHER, 1/2" REG PLT	2
8	68-010250		HEX NUT, 1/2 PLT	2
9	48-090040		CAPSCREW, 5/16 X 2 1/4 G5 PLT	1
10	66-010100		LOCKWASHER, 5/16 REG PLT	1
11	68-010100		HEX NUT, 5/16 PLT	1
13	02-056-007		SEAL (NAT 204029X)	1
14	21-058-006		SPINDLE, 6 3/4 W/HOLE	1
15	02-051-015		CONE, BEARING	2
16	21-058-003		WHEEL, W/TIRE 18 X 18.5 X 8	1
17	68-030101		SLOTTED NUT, 1-14 NF THIN HEX PLN	1
18	76-010100		COTTER PIN, 3/16 X 1 1/2 PLT	1
19	16-058-002		CAP, DUST	1
20	03-080-944		RING, HUBCAP	1
21	54-010200		SETSCREW, 1/2 X 5/8 SQ HD CUPPT	2

8 X 10 GAUGE WHEEL (2 X 4)

(21-082-013)



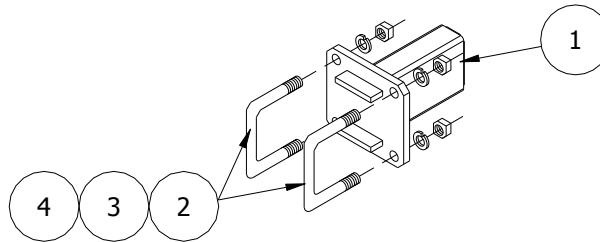
ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-080		GAUGE WHEEL ARM	1
2	21-080-010		BRACKET, GAUGE WHEEL	1
3	05-050-003		"U"-BOLT, 5/8 X 4 11/16 X 3 3/8	1
4	66-010300		LOCKWASHER, 5/8 REG PLT	2
5	68-010300		HEX NUT, 5/8 PLT	2
6	48-090750		CAPSCREW, 1/2 X 2 1/2 G5 PLT	2
7	66-010250		LOCKWASHER, 1/2" REG PLT	2
8	68-010250		HEX NUT, 1/2 PLT	2
9	48-090040		CAPSCREW, 5/16 X 2 1/4 G5 PLT	1
10	66-010100		LOCKWASHER, 5/16 REG PLT	1
11	68-010100		HEX NUT, 5/16 PLT	1
13	02-056-007		SEAL (NAT 204029X)	1
14	21-058-006		SPINDLE, 6 3/4 W/HOLE	1
15	02-051-015		CONE, BEARING	2
16	03-058-008		HUB, 45° ZERK W/CUPS	1
17	03-058-007		TIRE, 8 X 10 TUBELESS W/WHEEL	1
18	03-058-009		BOLT, 1/2 X 7/8-20 WHEEL	5
19	68-030101		SLOTTED NUT, 1-14 NF THIN HEX PLN	1
20	76-010100		COTTER PIN, 3/16 X 1 1/2 PLT	1
21	16-058-002		CAP, DUST	1
22	03-080-943		BRACKET, HUBCAP	1

GAUGE WHEEL, (3 X 4) (FOR 116" MACHINES)
(21-082-046)

ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
23	15-023-023		TOOL BAR CAP, 4"	2
24	48-091100		CAPSCREW, 5/8 X 2 G5 PLT	4
25	66-010300		LOCKWASHER, 5/8 PLT	4
26	68-010300		HEX NUT, 5/8 PLT	4

On 116" machines used in place of "U" bolt (05-050-003) when mounting gauge wheel.

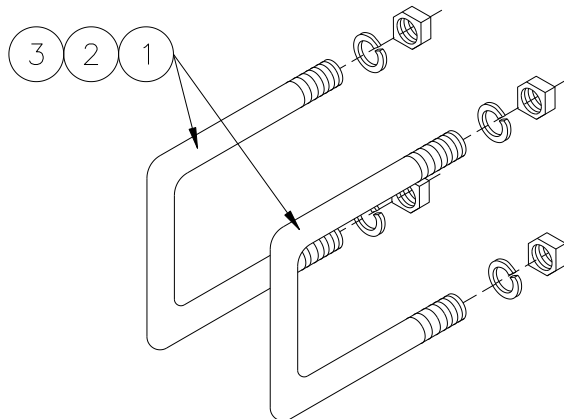
8 X 10 GAUGE WHEEL EXTENSION
(21-082-032)



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-039		EXTENSION	2
2	05-050-003		U-BOLT, 5/8 X 4 11/16 X 3 3/8	4
3	66-010300		LOCKWASHER, 5/8 PLT	8
4	68-010300		HEX NUT, 5/8 PLT	8

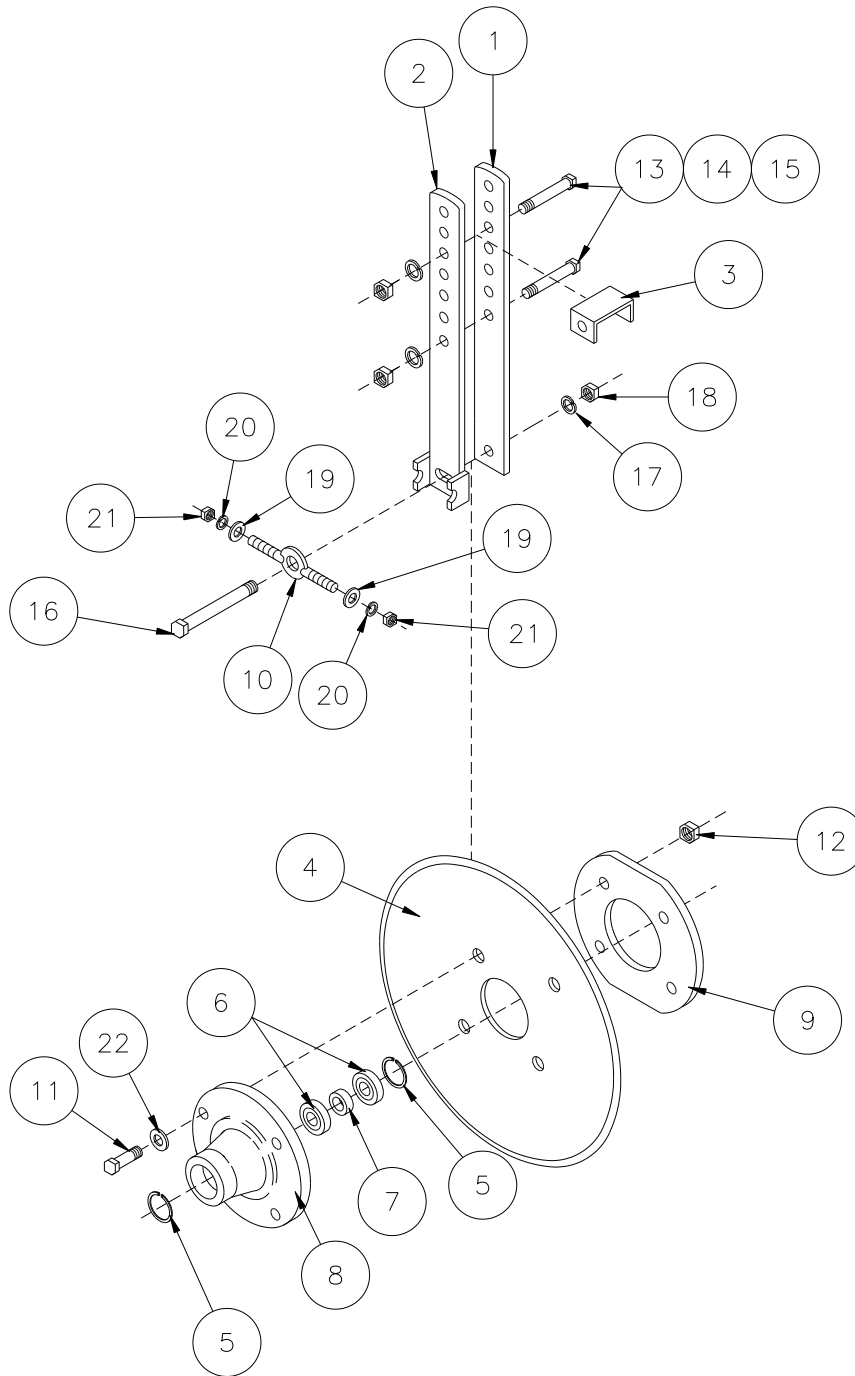
5/8" U-BOLT BUNDLE
(21-082-037)

**FOR 236 & 260
FOLDING
MACHINES ONLY**



ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	20-050-002		U-BOLT, 5/8"	2
2	68-010300		HEX NUT, 5/8 PLT	4
3	66-010300		LOCKWASHER, 5/8 PLT	4

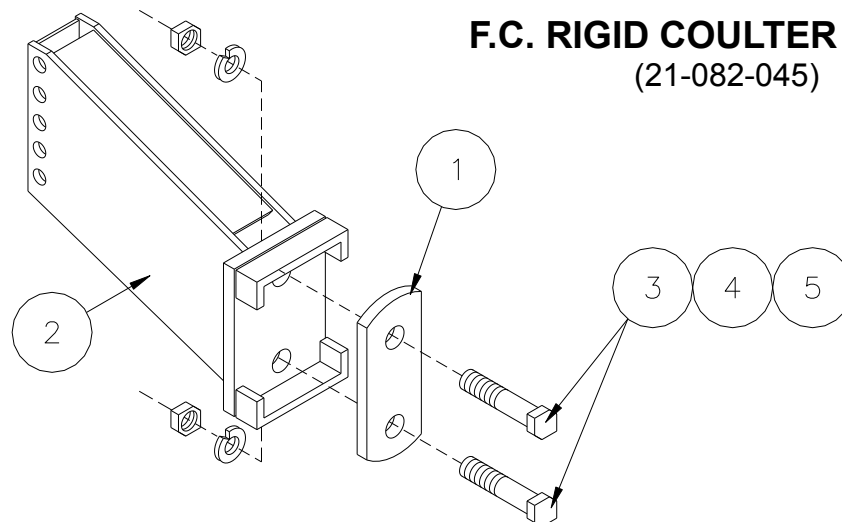
S.W. RIGID COULTER (14-082-035)



ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	14-023-033		COULTER ARM, LT	1
2	14-080-016		COULTER ARM, RT	1
3	14-027-005		COULTER SHIPPING BRACKET	1
4	02-050-030		COULTER, 20"	1
*5	04-050-078		RETAINING RING, 2 3/64"	2
*6	04-051-004		CYLINDER BEARING, 3/4	2

ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
*7	04-024-069		BEARING SPACER, 3/8	1
*8	03-057-014		COULTER HUB	1
9	03-023-064		COULTER FLANGE	1
10	04-080-052		COULTER ADJ ROD	1
11	48-060100		CAPSCREW, 3/8 X 1 1/2 G5 PLT	4
12	72-010050		LOCKNUT, 3/8 G"B" PTD & WAXED	4
13	48-091100		CAPSCREW, 5/8 X 5 G5 PLT	2
14	66-010300		LOCKWASHER, 5/8 PLT	2
15	68-010300		HEX NUT, 5/8 PLT	2
16	48-010800		CAPSCREW, 3/4 X 5 1/2 G2 PLT	1
17	66-010350		LOCKWASHER, 3/4 REG	1
18	68-010350		HEX NUT, 3/4 PLT	1
19	62-010200		FLATWASHER, 1/2 PLT	2
20	66-010250		LOCKWASHER, 1/2 PLT	2
21	68-010250		HEX NUT, 1/2 PLT	2
22	62-010050		FLATWASHER, 5/16 PLT	4

*These items make up Hub Assembly (04-081-014)

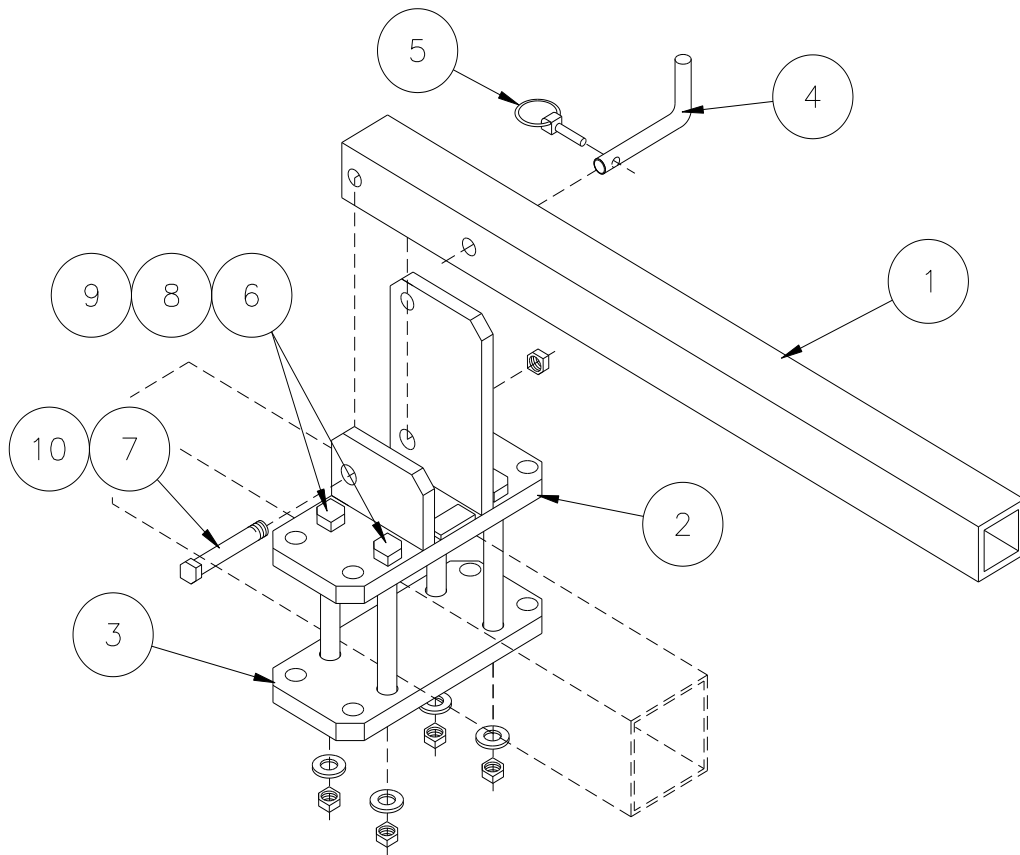


F.C. RIGID COULTER MOUNT
(21-082-045)

ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	15-023-023		4" T.B. CAP	2
2	21-080-055		F.C. RIGID COULTER MOUNT WELDT.	2
3	48-091060		CAPSCREW, 5/8 X 4 G5 PLT	4
2	68-010300		HEX NUT, 5/8 PLT	4
3	66-010300		LOCKWASHER, 5/8 PLT	4

(4 X 4) 60" MARKER
(02-082-231)

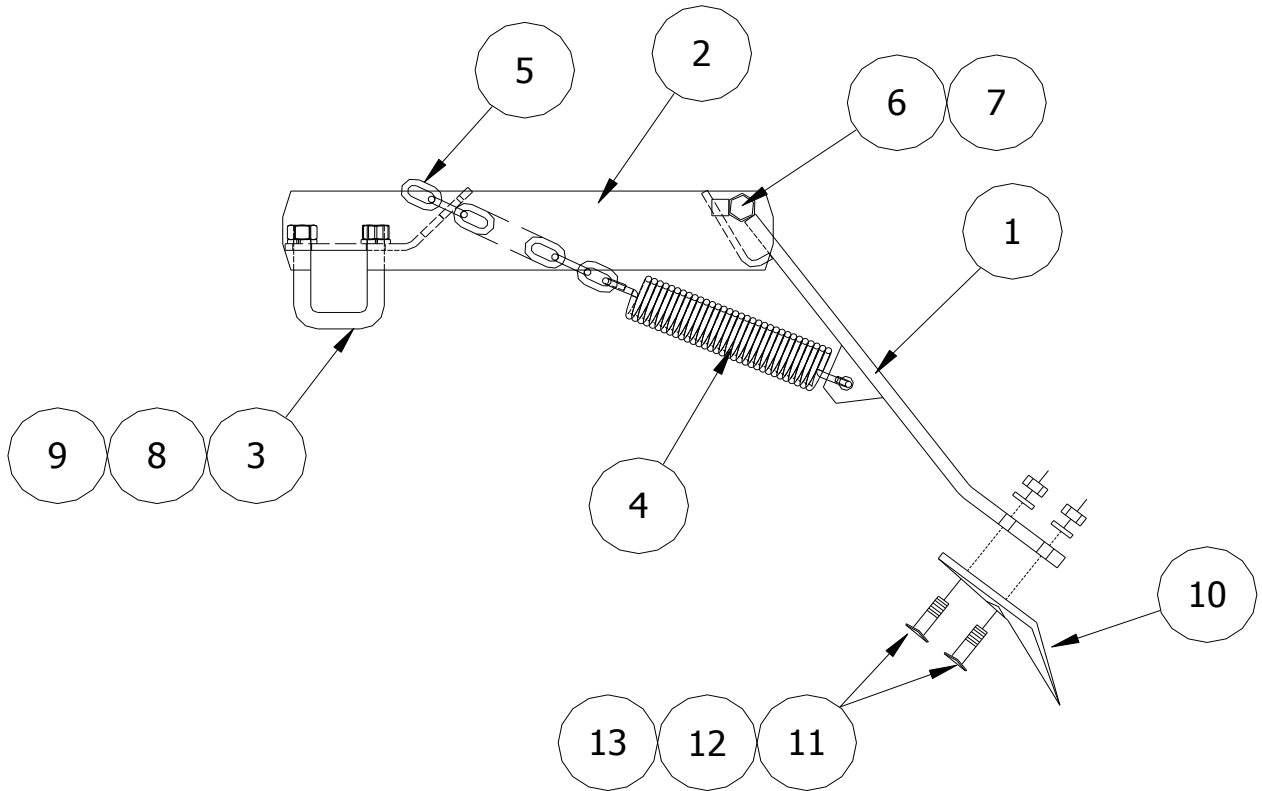
(4 X 7) 88" MARKER
(02-082-232)



ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY	
				-231	-232
1	02-024-078		TUBE, 60" ROW MARKERS	1	-
	02-024-112		TUBE, 88" ROW MARKERS	-	1
2	02-080-259		BRACKET, 4 X 4 ROW MARKERS	1	1
3	02-023-234		BASE, 4 X 4 ROW MARKERS	1	1
4	02-026-044		PIN, ADJUSTABLE PIPE	1	1
5	04-050-015		KLIK PIN, 3/16 X 1 1/4	1	1
6	48-091200		CAPSCREW, 5/8 X 6 G5 PLT	4	4
7	48-091060		CAPSCREW, 5/8 X 4 G5 PLT	1	1
8	68-010300		HEX NUT, 5/8 PLT	4	4
9	66-010300		LOCKWASHER, 5/8 PLT	4	4
10	72-020050		LOCKNUT, 5/8 STOVER G"C" PLT	1	1

F.C. REAR MARKER ASSEMBLY

(21-082-047)



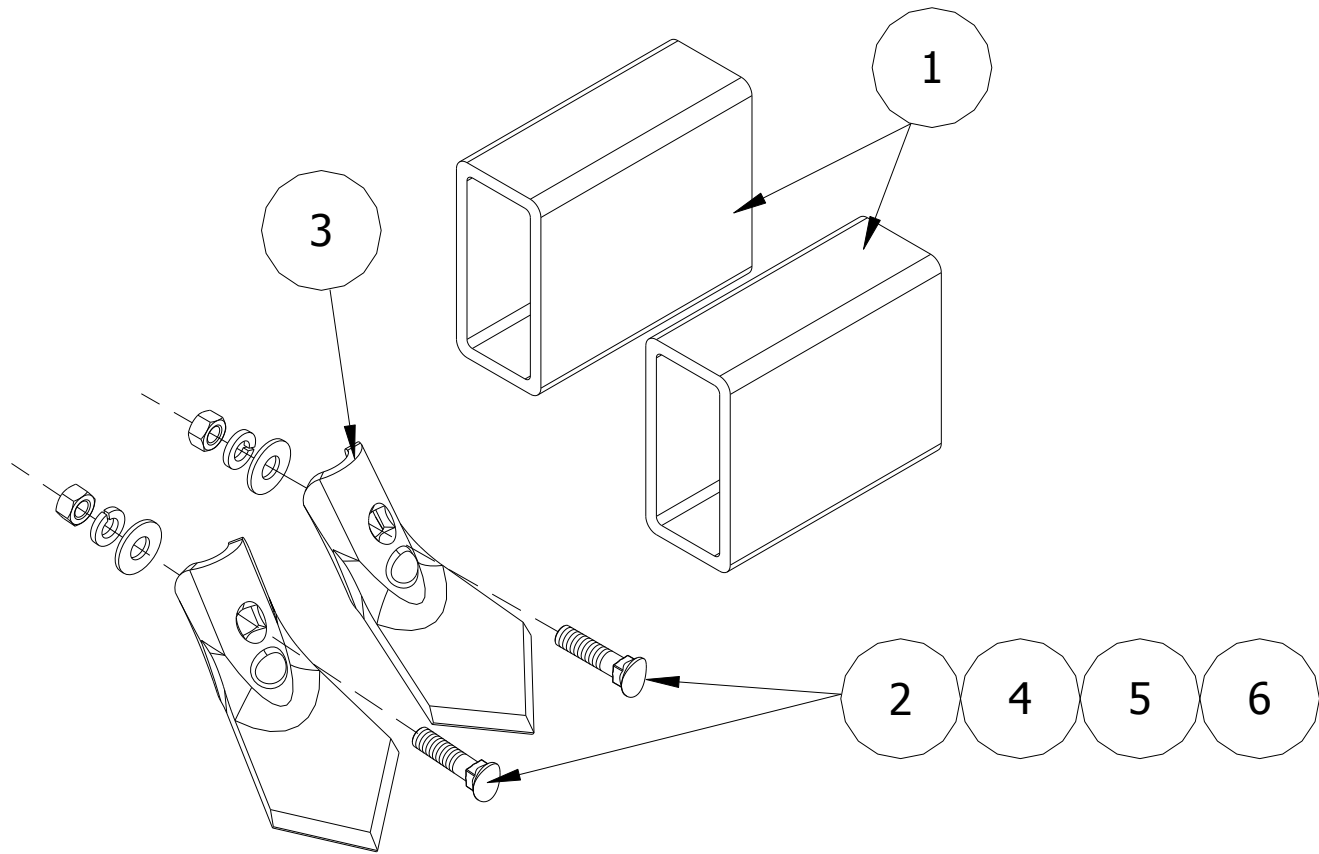
ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	21-080-057		ROW MARKER EXT WELD'T	1
2	21-080-058		F.C. ROW MARKER BRACE	1
3	21-050-001		"U"-BOLT, 5/8 X 2 11/16 X 3 5/16	1
4	21-050-016		EXT. SPRING, 1.56 X 9.5	1
5	03-050-004		3/16 PROOF CHAIN - 18 LINKS	1
6	48-091050		CAPSCREW, 5/8 X 3 1/2 G5 PLT	1
7	72-020050		LOCKNUT, 5/8	1
8	68-010300		HEX NUT, 5/8	2
9	66-010300		LOCKWASHER, 5/8	2

SINGLE PLOW POINT

(02-082-192)

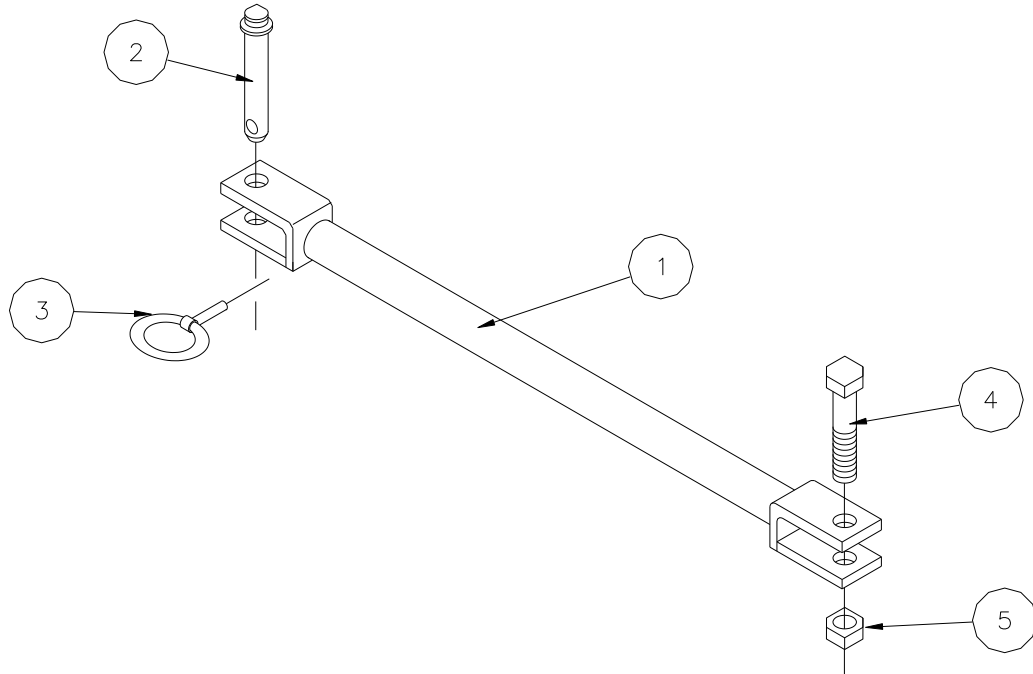
ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
10	02-057-023		SINGLE POINT PLOW	1
11	60-010100		PLOW SCREW, 3/8 X 1 1/2 G2 PLT	2
12	66-010150		LOCKWASHER, 3/8 PLT	2
13	68-010150		HEX NUT, 3/8 PLT	2

ROW MARKER SWEEP & BLOCK ASSEMBLY
(02-082-230)



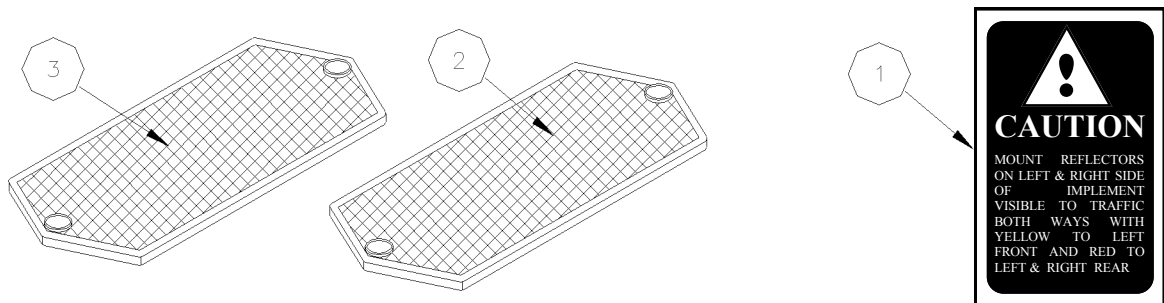
ITEM	PART NO	SERIAL NO OR YR	DESCRIPTION	QTY
1	02-024-124		ROW MARKER BLOCK	2
2	14-050-030		BOLT, 3/8 X 1 1/2 ELIPTIC HD. PLOW	2
3	04-057-045		SWEEP, 2 1/2 X 2 3/4	2
4	62-010100		FLATWASHER, 3/8 PLT	2
5	66-010150		LOCKWASHER, 3/8 PLT	2
6	68-010150		HEX NUT, 3/8 PLT	2

TRANSPORT PIPE (FOLDING MACHINES)
(07-082-005)



ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY
1	07-080-007		PIN, TRANSPORT	2
2	02-050-140		PIN, CYLINDER	2
3	02-050-062		SNAP PIN, 1/4 X 2 1/8	2
4	48-091400		CAPSCREW, 3/4 X 3 G5 PLT	2
5	72-030050		LOCKNUT, 3/4 STOVER THIN COLLAR	2

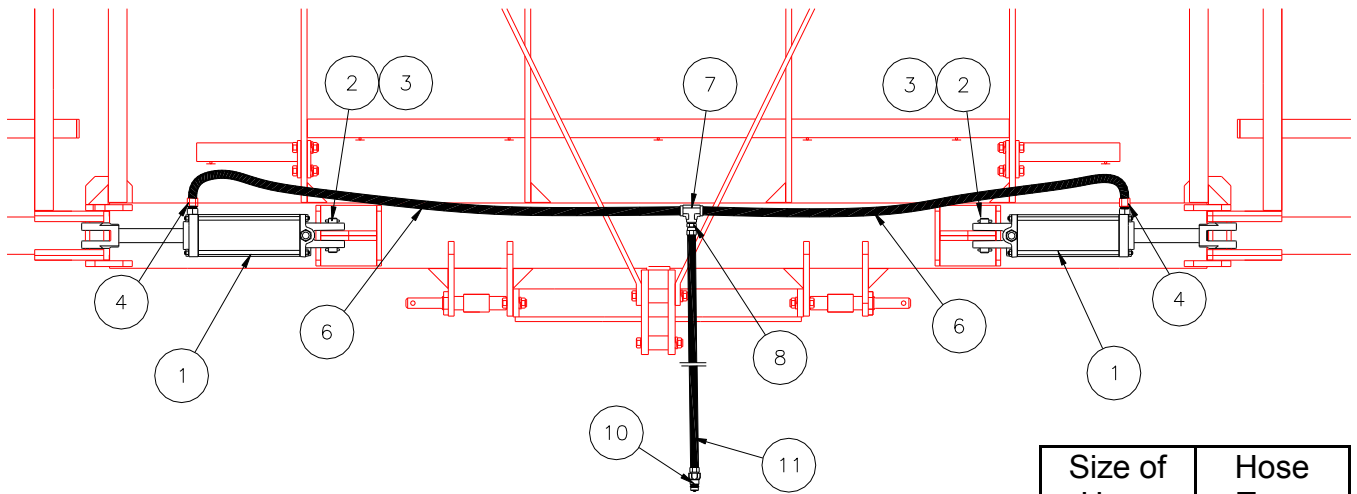
REFLECTOR BUNDLE



ITEM	PART NO.	SERIAL NO OR YR	DESCRIPTION	QTY
1	03-050-071		DECAL, REFLECTOR CAUTION	1
2	03-050-069		REFLECTOR, AMBER	1
3	03-050-070		REFLECTOR, RED	2

HYDRAULIC LAYOUTS AND CYLINDER BREAKDOWNS

LIFT-TYPE 90° FOLDING FIELD CULTIVATORS
(FOR 236",260",276" & 316")



Size of Hose	Hose Type
3/8"	6M3K
1/2"	8M3K
3/4"	12M3K
1 1/4"	20M3K

4 X 8 WING CYLINDER
(21-082-027) (Two Per Machine)

ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY.
1	21-061-087	(-2007)	CYLINDER, 4 X 8 HYDRAULIC	(1)
	21-061-110	(2008-)	CYLINDER, 4 X 8 HYDRAULIC	1
2	21-026-007		PIN, 1" CLEVIS	1
3	03-050-026		PIN, 1/4 X 2 ROLL	2
4	21-061-028		ADAPTER, 8MB-8FP	1
5	33-050-154		HYDRAULIC OIL	.4200

WING HYDRAULIC HOSES
(21-082-034)

ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY.
6	21-059-001		HOSE, 6M3K-8MP-8MPX-65"	2
7	07-050-001		TEE, 1/2" GALV	1
8	21-059-002		RESTRICTOR, 8MP-8FP-.062	1

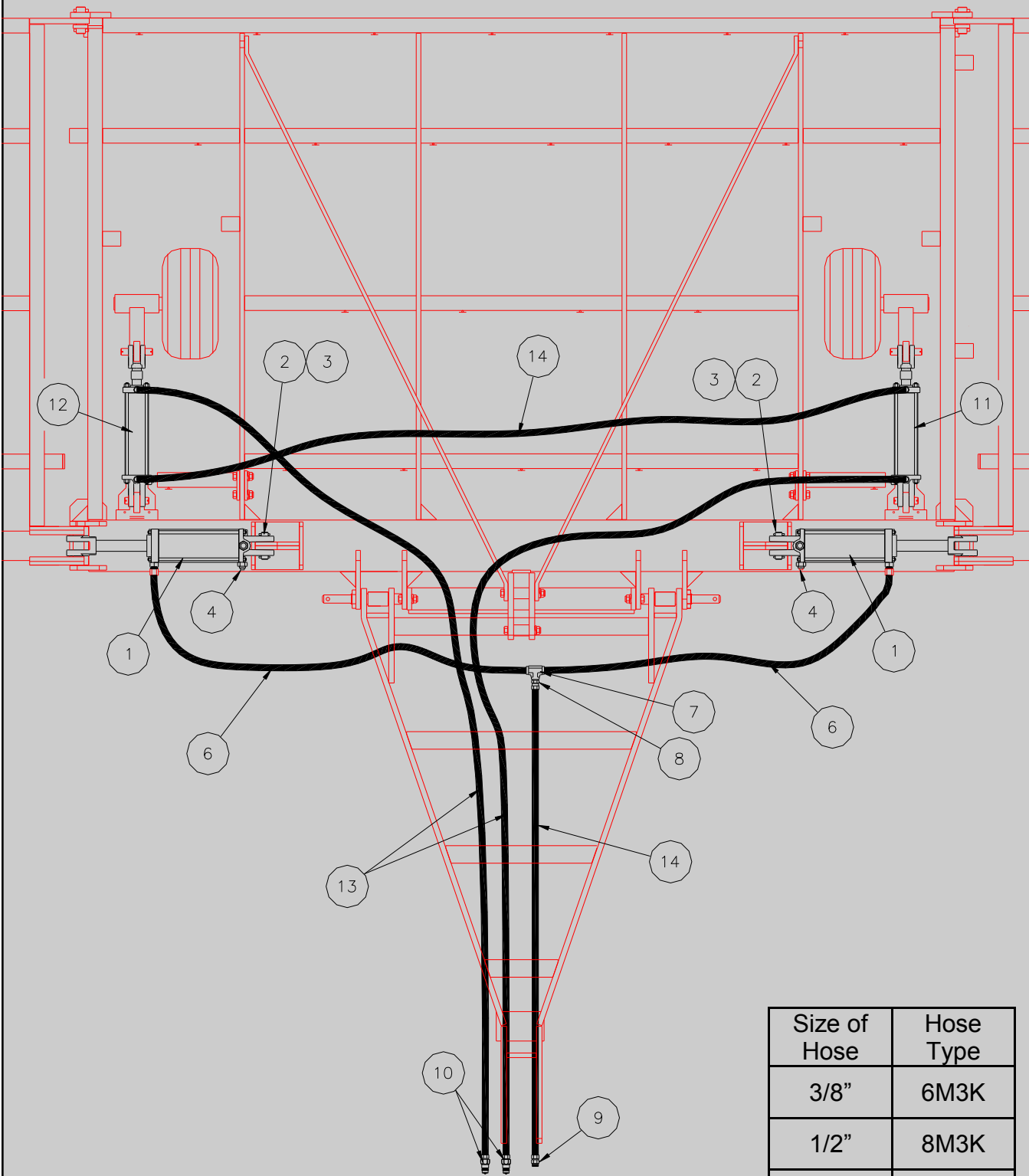
3/8 X 48' HYDRAULIC HOSE
(21-082-035)

ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY.
10	47-059-002		QUICK COUPLER, 1/2"	1
11	09-059-002		HOSE, 6M3K-8MP-8MPX-48"	1

PULL-TYPE 90° FOLDING FIELD CULTIVATORS

(FOR 236",260",276" & 316")

(FOR MACHINES PRIOR TO 2009)



Size of Hose	Hose Type
3/8"	6M3K
1/2"	8M3K
3/4"	12M3K
1 1/4"	20M3K

4 X 8 WING CYLINDER
(21-082-027) (Two Per Machine)

ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY.
1	21-061-087	(-2007)	CYLINDER, 4 X 8 HYDRAULIC W/BRE	(1)
	21-061-110	(2008-)	CYLINDER, 4 X 8 HYDRAULIC	1
2	21-026-007		PIN, 1" CLEVIS	1
3	03-050-026		PIN, 1/4 X 2 ROLL	2
4	21-061-028		ADAPTER, 8MB-8FP	1
5	33-050-154		HYDRAULIC OIL	.4200

WING HYDRAULIC HOSES
(21-082-034)

ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY.
6	21-059-001		HOSE, 6M3K-8MP-8MPX-65"	2
7	07-050-001		TEE, 1/2" GALV	1
8	21-059-002		RESTRICTOR, 8MP-8FP-.062	1
9	21-050-010		PLUG, 1/2" PLASTIC	1
10	47-059-002		QUICK COUPLER, 1/2"	2

3 1/4 X 8 HYDRAULIC CYLINDER
(21-082-030)

ITEM	PART NO	DESCRIPTION	QTY
11	21-061-002	CYLINDER, 3 1/4 X 8	1

3 X 8 REPHASE CYLINDER
(21-082-031)

ITEM	PART NO	DESCRIPTION	QTY
12	21-061-003	CYLINDER, 3 X 8 REPHASE	1

3/8" X 190" HYD HOSE BUNDLE
(21-082-038)

ITEM	PART NO	DESCRIPTION	QTY
13	08-059-038	HOSE, 6M3K-8MP-8MPX-190"	2

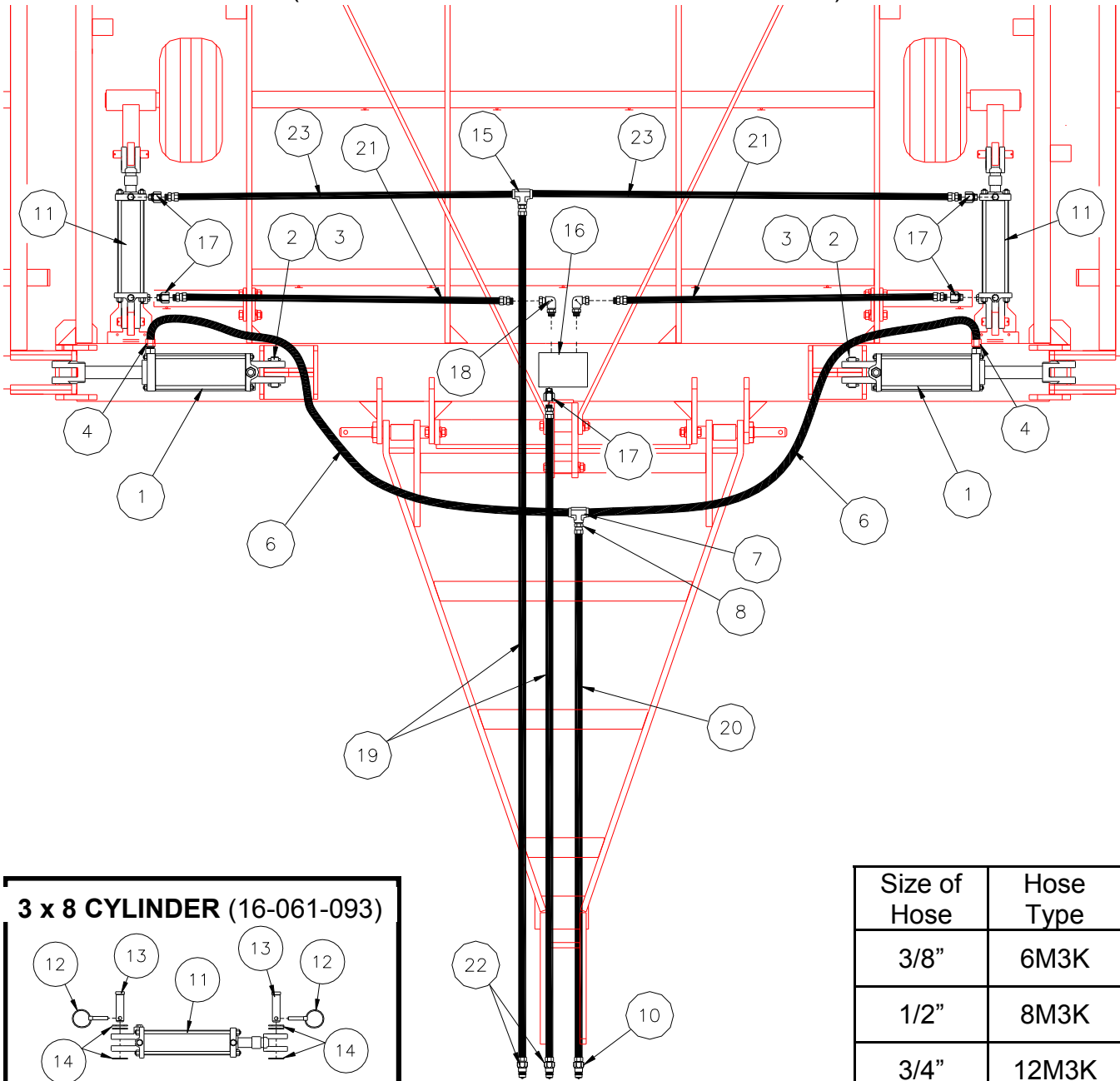
120" HYD HOSE BUNDLE
(21-082-036)

ITEM	PART NO	DESCRIPTION	QTY
14	03-059-002	HOSE, 6M3K-8MP-8MPX-120	2

PULL-TYPE 90° FOLDING FIELD CULTIVATORS

(FOR 236",260",276" & 316")

(FOR MACHINES FROM 2009 TO PRESENT)



Size of Hose	Hose Type
3/8"	6M3K
1/2"	8M3K
3/4"	12M3K
1 1/4"	20M3K

4 X 8 WING CYLINDER (21-082-027) (Two Per Machine)

ITEM	PART NO.	SERIAL NO OR YR.	DESCRIPTION	QTY.
1	21-061-110	(2008-2013)	CYLINDER, 4 X 8 HYDRAULIC (Energy)	(1)
	21-061-114	(2014-)	CYLINDER, 4 X 8 HYDRAULIC (Bailey)	1
2	21-026-007		PIN, 1" CLEVIS	1
3	03-050-026		PIN, 1/4 X 2 ROLL	2
4	21-061-028		ADAPTER, 8MB-8FP	1
5	33-050-154		HYDRAULIC OIL	.4200

WING HYDRAULIC HOSES

(21-082-034)

ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY.
6	21-059-001		HOSE, 6M3K-8MP-8MPX-65"	2
7	07-050-001		TEE, 1/2" GALV	1
8	21-059-002		RESTRICTOR, 8MP-8FP-.062	1
10	47-059-002		QUICK COUPLER, 1/2"	1

FLOW DIVIDER W/FITTINGS & CYLINDER

(21-082-131)

ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY
11	16-061-093		CYLINDER, 3 X 8 HYDRAULIC	1
12	02-050-002		PIN, 7/16 X 1 3/4 KLIK	8
13	11-050-031		PIN, 1" CLEVIS	4
14	62-020050		FLATWASHER, 1" SAE	24
15	07-050-001		TEE, 1/2 NPTF HYD	1
16	48-061-027		FLOW DIVIDER	1
17	05-050-013	(-2010)	ADAPTER, 8MP-8FPX-90°	(2)
	21-061-028	(2011-)	ADAPTER, 8MB-8FP	5
18	42-059-022	(2011-)	ADAPTER, 8MB-8FPX-90°	2

120" HYD HOSE BUNDLE

(03-082-058)

ITEM	PART NO	DESCRIPTION	QTY
19	03-059-002	HOSE, 6M3K-8MP-8MPX-120	2

120" HYD HOSE BUNDLE

(21-082-036)

ITEM	PART NO	DESCRIPTION	QTY
20	03-059-002	HOSE, 6M3K-8MP-8MPX-120	1

80" HYD HOSE BUNDLE

(02-082-137)

ITEM	PART NO	DESCRIPTION	QTY
21	07-059-004	HOSE, 6M3K-8MP-8MPX-80	2
22	47-059-002	QUICK COUPLER, 1/2"	2

100" HYD HOSE BUNDLE

(02-082-174)

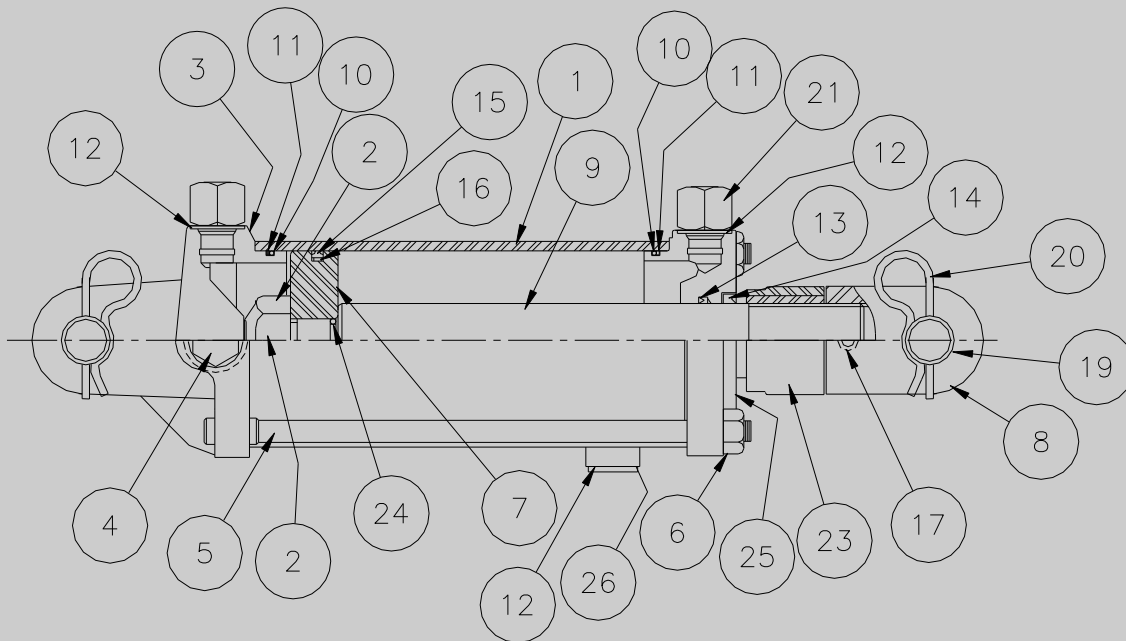
ITEM	PART NO	DESCRIPTION	QTY
23	07-059-003	HOSE, 6M3K-8MP-8MPX-100	2

REPHASING CYLINDER (LIFT CYLINDER PULL-TYPE)

(FOR MACHINES PRIOR TO 2009)

3 1/4 X 8 CYLINDER
(21-061-002)

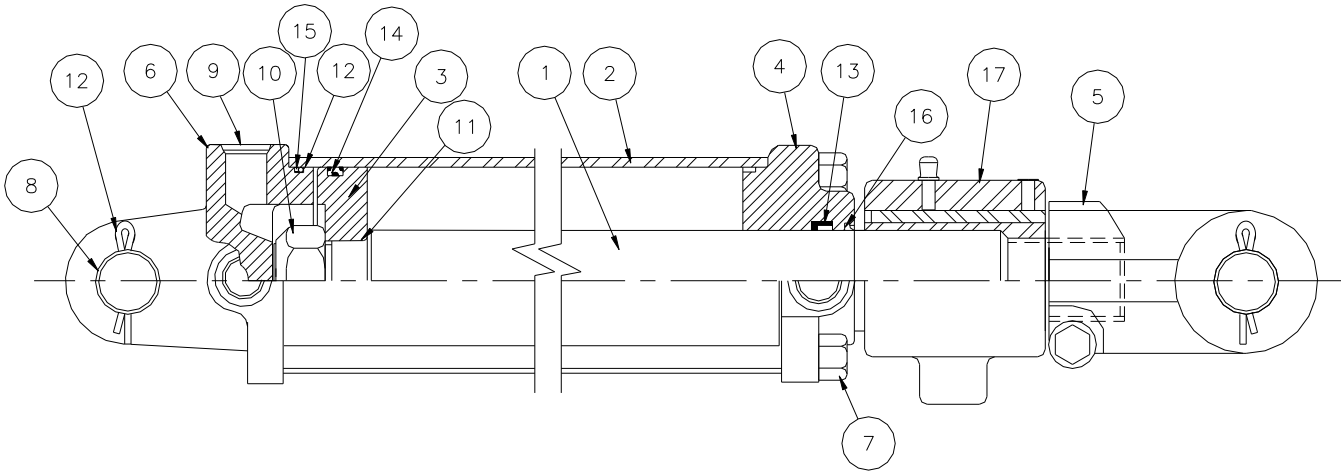
3 X 8 CYLINDER
(21-061-003)



ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY.	
				-002	-003
1	21-061-031		CASE ASSEMBLY (3 1/4 X 8)	1	-
	21-061-051		CASE ASSEMBLY (3 X 8)	-	1
2	21-061-005		LOCKNUT	1	1
3	21-061-032		BOTTOM (3 1/4 X 8)	1	-
	21-061-047		BOTTOM (3 X 8)	-	1
4	21-061-015		PLUG ASSEMBLY	1	1
5	21-061-033		TIE ROD, 1/2 (3 1/4 X 8)	4	-
	21-061-054		TIE ROD, 7/16 (3 X 8)	-	4
6	68-010250		HEX NUT, 1/2	4	-
	68-010200		HEX NUT, 7/16	-	4
7	21-061-034		PISTON (3 1/4 X 8)	1	-
	21-061-057		PISTON (3 X 8)	-	1
8	21-061-035		CLEVIS MACHINED (1 1/4 DIA)	1	1
9	21-061-036		SHAFT (1 1/4 DIA)	1	1
10 *	21-061-037		O-RING (3 1/4 X 8)	2	-
§	21-061-052		O-RING (3 X 8)	-	2

ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY.	
				-002	-003
11 *	21-061-038		BACK-UP (3 1/4 X 8)	2	-
§	21-061-055		BACK-UP (3 X 8)	-	2
12* §	21-061-025		O-RING	4	3
13* §	21-061-039		U-CUP (1 1/4 DIA)	1	1
14* §	21-061-040		WIPER (1 1/4 DIA)	1	1
15 *	21-061-041		PISTON SEAL (3 1/4 X 8)	1	-
§	21-061-048		PISTON SEAL (3 X 8)	-	1
16 *	21-061-042		O-RING (3 1/4 X 8)	1	-
§	21-061-049		O-RING (3 X 8)	-	1
17	21-061-013		NYLON PLUG	1	1
18	21-061-012		SETSCREW	1	1
19	21-061-016		CLEVIS PIN	1	1
20	21-061-017		COTTER PIN	2	2
21	21-061-028		ADAPTER ASSEMBLY	2	2
22	21-061-018		DECAL	1	2
23	21-081-043		STOP COLLAR (1 1/4 DIA)	1	-
24* §	21-061-027		O-RING	1	1
25	21-061-044		HEAD (3 1/4 X 8)	1	-
	21-061-053		HEAD (3 X 8)	-	1
26	21-061-046		PLUG ASSEMBLY (REPHASE)	1	1
* These items make up 3 1/4 x 8 Seal Kit (21-061-045) used with Cylinder (21-061-002) § These items make up 3 x 8 Seal Kit (02-061-041) used with Cylinder (21-061-003)					

3 X 8 CYLINDER (LIFT CYLINDER PULL-TYPE)
 (FOR MACHINES 2009 TO PRESENT) (Prince Cylinders)
 (16-061-093)

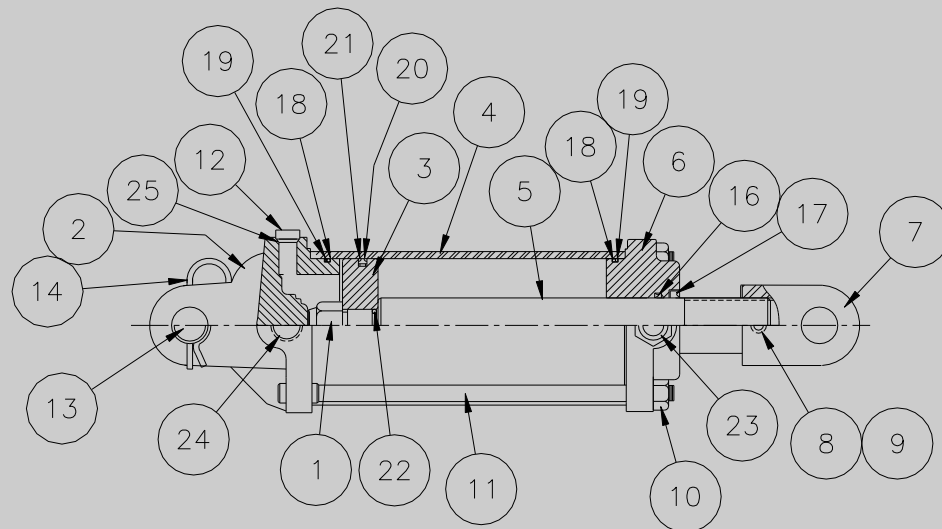


ITEM	PART NO,	SERIAL NO OR YR.	DESCRIPTION	QTY.
1	16-061-094		PISTON ROD	1
2	16-061-095		TUBE	1
3	16-061-096		PISTON	1
4	16-061-097		GLAND	1
5	16-061-098		CLEVIS ASSY	1
6	16-061-099		BUTT	1
7	16-061-100		TIE ROD ASSY	4
8	16-061-101		BUSHING	4
9	16-061-102		PORT PLUG	3
*10	16-061-103		LOCKNUT, 1-14	1
*11	16-061-104		O-RING,	1
*12	16-061-105		O-RING	2
*13	16-061-106		U-CUP	1
*14	16-061-107		CROWN SEAL	1
*15	16-061-108		BACK-UP, WASHER	2
*16	16-061-109		WIPER	1
17	16-061-110		STROKE CONTROL	1

* THESE PARTS MAKE UP SEAL KIT (16-061-111)

4 X 8 TIE BOLT HYDRAULIC CYLINDER (FOR WINGS)

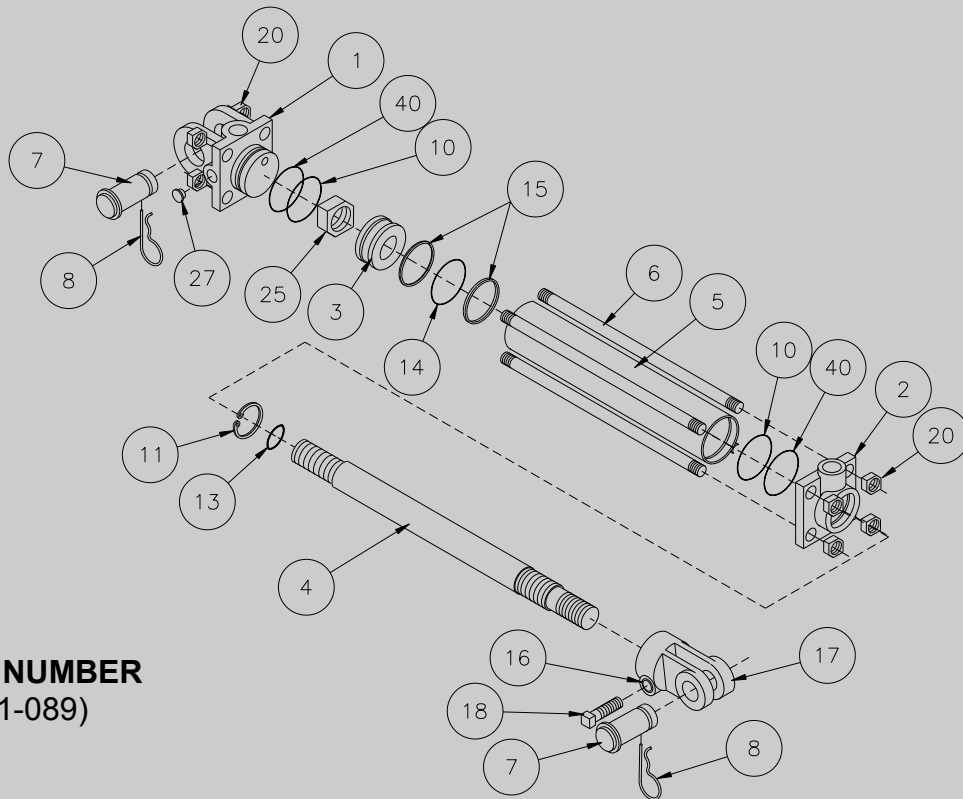
(21-061-001) (-2001) (Iowa Industries Cylinder)



ITEM	PART NO	DESCRIPTION	QTY
1	21-061-005	LOCKNUT	1
2	21-061-006	BOTTOM MACHINE (4 X 8)	1
3	21-061-007	PISTON (4 X 8)	1
4	21-061-008	CASE (4 X 8)	1
5	21-061-009	SHAFT (4 X 8)	1
6	21-061-010	HEAD MACHINE (4 X 8)	1
7	21-061-011	CLEVIS MACHINE (4 X 8)	1
8	21-061-012	SETSCREW	1
9	21-061-013	NYLON PLUG	1
10	68-010300	HEX NUT, 5/8	4
11	21-061-014	TIE ROD 5/8	4
12	21-061-015	PLUG ASSEMBLY	1
13	21-061-016	CLEVIS PIN	1
14	21-061-017	COTTER PIN	2
15	21-061-018	DECAL	1
*16	21-061-019	U-CUP (1 1/2 DIA)	1
*17	21-061-020	WIPER (1 1/2 DIA)	1
*18	21-061-021	O-RING	2
*19	21-061-022	BACK-UP	2
*20	21-061-023	PISTON SEAL	1
*21	21-061-0024	O-RING	1
*22	21-061-027	O-RING	1
23	21-061-028	ADAPTOR ASSEMBLY	1
24	21-061-056	BREATHER	1
25	21-061-025	O-RING	3

4 X 8 TIE BOLT HYDRAULIC CYLINDER (FOR WINGS)

(21-061-087) (2002-2007) (Monach Cylinder)

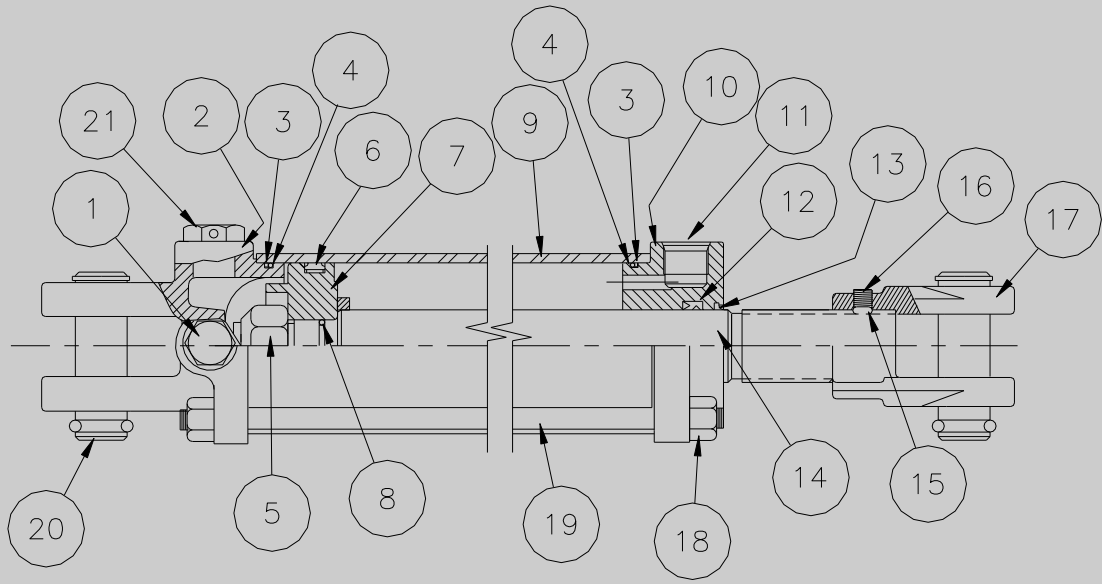


SEAL KIT NUMBER
(21-061-089)

ITEM	PART NO	DESCRIPTION	QTY
1	21-061-090	CLEVIS CAP	1
2	21-061-091	ROD CAP	1
3	21-061-092	PISTON	1
4	21-061-093	ROD	1
5	21-061-094	TUBE	1
6	21-061-095	TIE ROD	4
7	49-061-010	CLEVIS PIN	2
8	49-061-011	CLEVIS PIN CLIP	2
10	21-061-104	END CAP ORING	2
11	21-061-105	ROD WIPER SEAL	1
13	21-061-106	ROD DUST SEAL	1
14	21-061-107	PISTON SEAL	1
15	21-061-108	PISTON WEAR RING	2
16	49-061-012	NYLON THREAD PROTECTOR	1
17	21-061-099	ROD CLEVIS	1
18	49-061-014	SETSCREW	1
20	21-061-101	TIE ROD NUT	8
25	21-061-102	PISTON NUT	25
27	49-061-017	PORT PLUG	1
40	21-061-109	END CAP BACKUP WASHERS	2

4 X 8 TIE BOLT HYDRAULIC CYLINDER (FOR WINGS)

(21-061-110) (2008-2013) (Energy Cylinder)

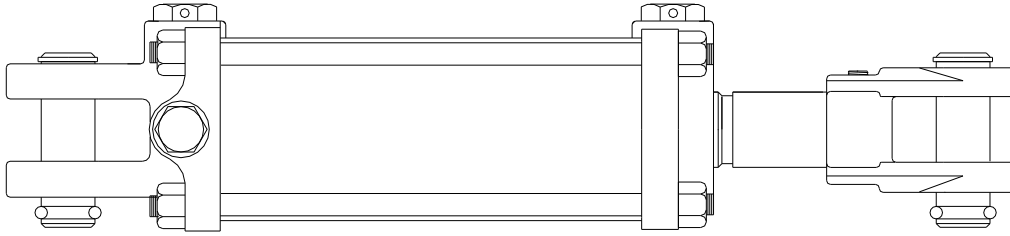


ITEM	PART NO	DESCRIPTION	QTY
1	21-061-015	PLUG ORING BOSS 3/4-16	2
2	16-061-040	BOTTOM CLEVIS, 4 DIA	1
3	21-061-068	BACK UP RING 3.75 X 4.00	2
4	21-061-065	ORING NT 3.75 X 4.00	2
5	23-061-004	LOCKNUT, 1 1/4-12	1
6	21-061-074	PSP PISTON SEAL, 4" BORE	1
7	16-061-041	PISTON, 4" DIA	1
8	16-061-042	ORING, 1.125 X 1.250	1
9	21-061-111	WALL, 4 ID X 0.187W X 10.187	1
10	23-061-036	GUIDE, 4 OD - 1.50 ID	1
11	07-061-042	PLUG ORING BOSS 3/4-16	1
12	23-061-037	UCUP LIP, 1.50 X 1.875 X 0.312	1
13	23-061-038	WIPER RING, 1.5	1
14	21-061-112	ROD, 1.50 D X 15.390	1
15	33-061-036	BALL NYLON, .250 G2	1
16	54-020010	SETSCREW 3/8-16 X .375	1
17	16-061-048	ROD CLEVIS, 1.50-12UNF	1
18	21-061-070	HEX NUT, 5/8-18 G5	8
19	21-061-113	TIE ROD, .584 D X 13.25	4
20	21-061-071	CLEVIS PIN, W/CLIP 1"DIA	1
21	21-061-056	BREATHER , 3/4-16 UNF	1

4 X 8 X 1.5 HYDRAULIC CYLINDER (BAILEY)

(21-061-114)

(Used on Machines From 2014 to Present)



Bailey's Hydraulic Cylinder (21-061-114) will replace Energy's Hydraulic Cylinder (21-061-110).

Bailey will not sale any repair parts except for a Seal Kit.

USE SEAL KIT # 21-061-216

The following is a list of serial numbers issued to our machines at the beginning of each year. To determine when a unit was made, find the range within which the particular serial number falls. It would have been produced between January 1 to December 31 of that year.

YEAR	SERIAL NUMBERS
1985	27986-29695
1986	29696-31095
1987	31096-33234
1988	33235-35548
1989	35549-38496
1990	38497-41771
1991	41772-44466
1992	44467-47001
1993	47002-48750
1994	48751-51549
1995	51551-54262
1996	54263-56661
1997	56662-59465
1998	59466-62097
1999	62098-63986
2000	63987-65692
2001	65693-67340
2002	67341-68699
2003	68700-70482
2004	70483-72646
2005	72647-74866
2006	74867-76368
2007	76369-77883
2008	77884-79891
2009	79892-80944
2010	80945-81775
2011	81776-83453
2012	86454-85092
2013	85093-86418
2014	86419-87790
2015	87791-89096
2016	89097-



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