

# ***Besler Industries Inc.***

## **SETUP AND PARTS MANUAL**

### **8000 SERIES**

### **ROLLING STALK MANAGER**

### **FOLDING TOOLBAR**

#### **Model No's.**

<b>80830F</b>	<b>8 Row 30" Spacing</b>
<b>80836F</b>	<b>8 Row 36" Spacing</b>
<b>81030F</b>	<b>10 Row 30" Spacing</b>
<b>81036F</b>	<b>10 Row 36" Spacing</b>
<b>81230F</b>	<b>12 Row 30" Spacing</b>
<b>81236F</b>	<b>12 Row 36" Spacing</b>
<b>81630F</b>	<b>16 Row 30" Spacing</b>
<b>81636F</b>	<b>16 Row 36" Spacing</b>

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## SPECIFICATIONS

MODEL NO.	NO. of ROWS	ROW SPACING	TRANSPORT WIDTH	STATIC HEIGHT
80430	4	30 IN.	10'	40"
80436	4	36 IN.	12'	40"
80630	6	30 IN.	15' 5"	40"
80636	6	36 IN.	18'	40"
80830	8	30 IN.	20' 4"	40"
80836	8	36 IN.	23' 11"	40"
80830F	8	30 IN.	14' 2"	7' 11"
80836F	8	36 IN.	16' 3"	8' 9"
81030F	10	30 IN.	19' 2"	7' 11"
81036F	10	36 IN.	22' 3"	8' 9"
81230F	12	30 IN.	19' 2"	10' 3"
81236F	12	36 IN.	22' 3"	11' 8"
81630F	16	30 IN.	24'	12' 2"
81636F	16	36 IN.	28' 3"	14'
80830T	8	30 IN.	20' 4"	40"
80836T	8	36 IN.	23' 11"	40"
80830FT	8	30 IN.	14' 2"	7' 11"
80836FT	8	36 IN.	16' 3"	8' 9"
81030FT	10	30 IN.	19' 2"	7' 11"
81036FT	10	36 IN.	22' 3"	8' 9"
81230FT	12	30 IN.	19' 2"	10' 3"
81236FT	12	36 IN.	22' 3"	11' 8"
81630FT	16	30 IN.	24'	12' 2"
81636FT	16	36 IN.	28' 3"	14'

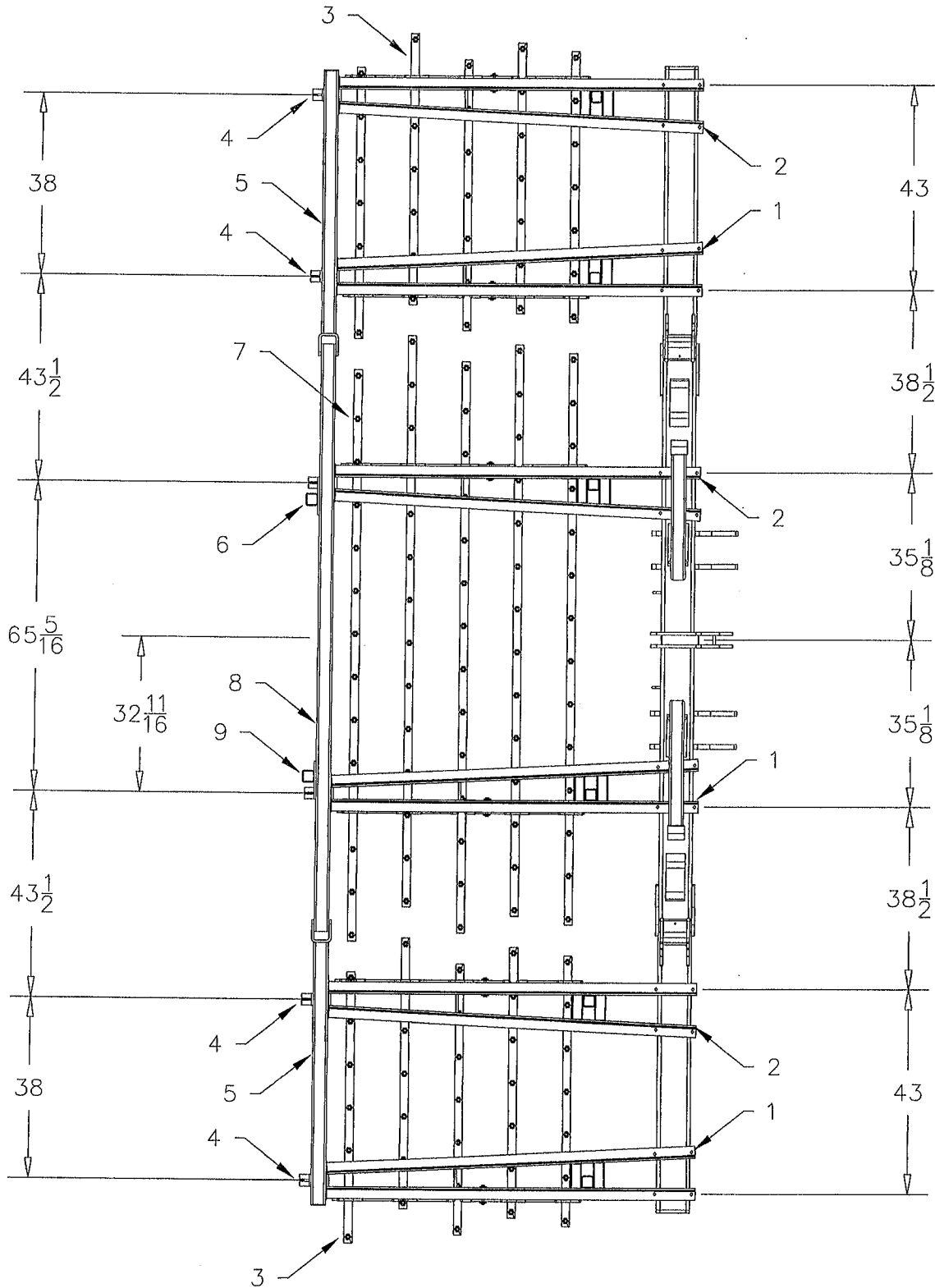
## LUBRICATION

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Rotor shaft bearings (Part No. 10125) should be greased every 50 hours.

Wing hinges and harrow carrier bar hinges should be greased every 100 hours.

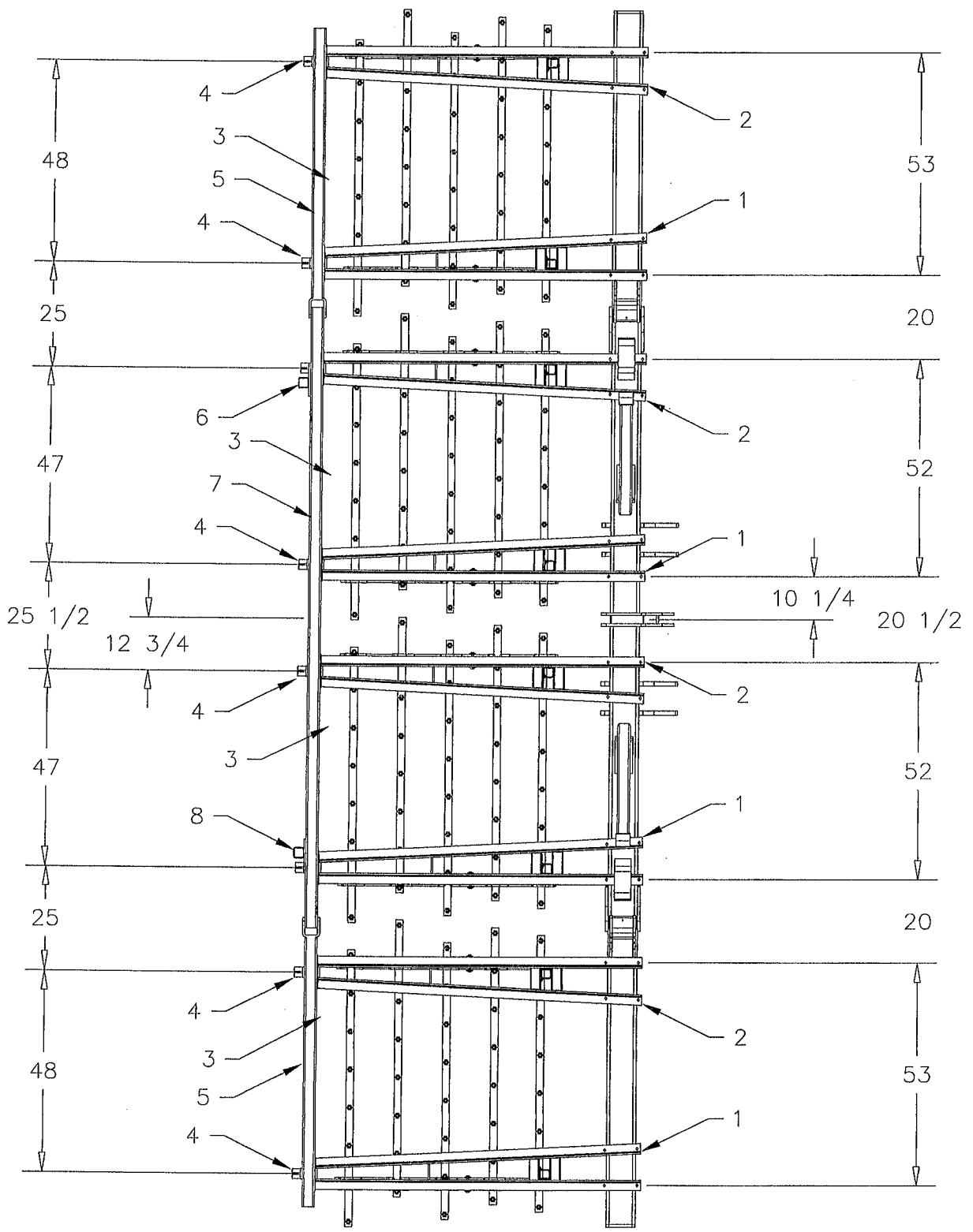
8 ROW 30"



Dwg. No. 00071

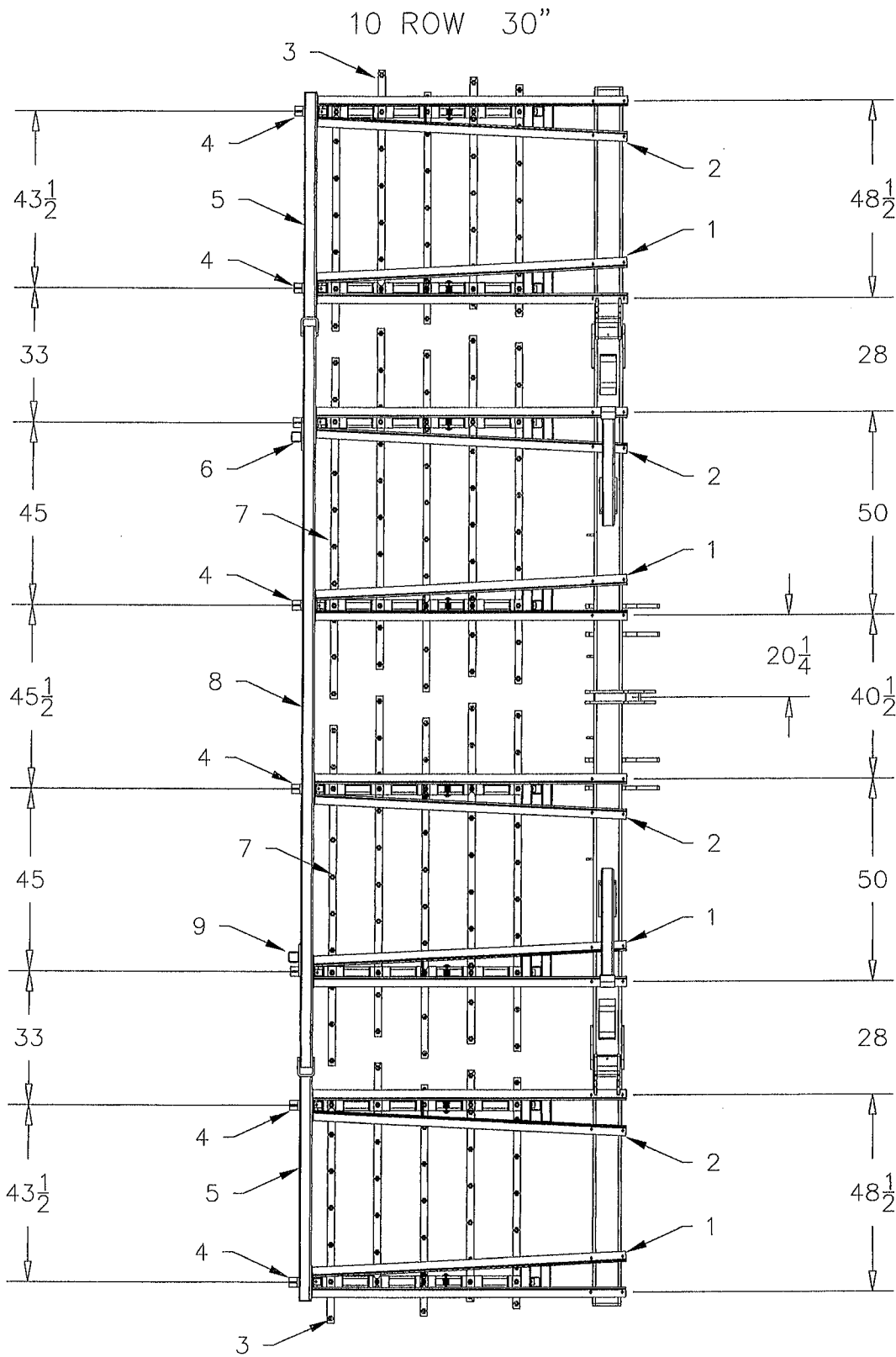
REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10161	72" ARM (LEFT)	3	5	10276	WING CARRIER BAR	2
2	10162	72" ARM (RIGHT)	3	6	10153	REAR LOCK/STAND (RH)	1
3	10261	HARROW SECTION 5'	2	7	10260	HARROW SECTION 10'	1
4	10152	REAR CHAIN LOCK	4	8	10270	CENTER CARRIER BAR	1
				9	10154	REAR LOCK/STAND (LH)	1

8 ROW 36"



Dwg. No. 00073

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10161	72" ARM (LEFT)	4	5	10277	WING CARRIER BAR	2
2	10162	72" ARM (RIGHT)	4	6	10153	REAR LOCK\STAND (RH)	1
3	10256	HARROW SECTION 6'	4	7	10271	CENTER CARRIER BAR	1
4	10152	REAR CHAIN LOCK	6	8	10154	REAR LOCK\STAND (LH)	1

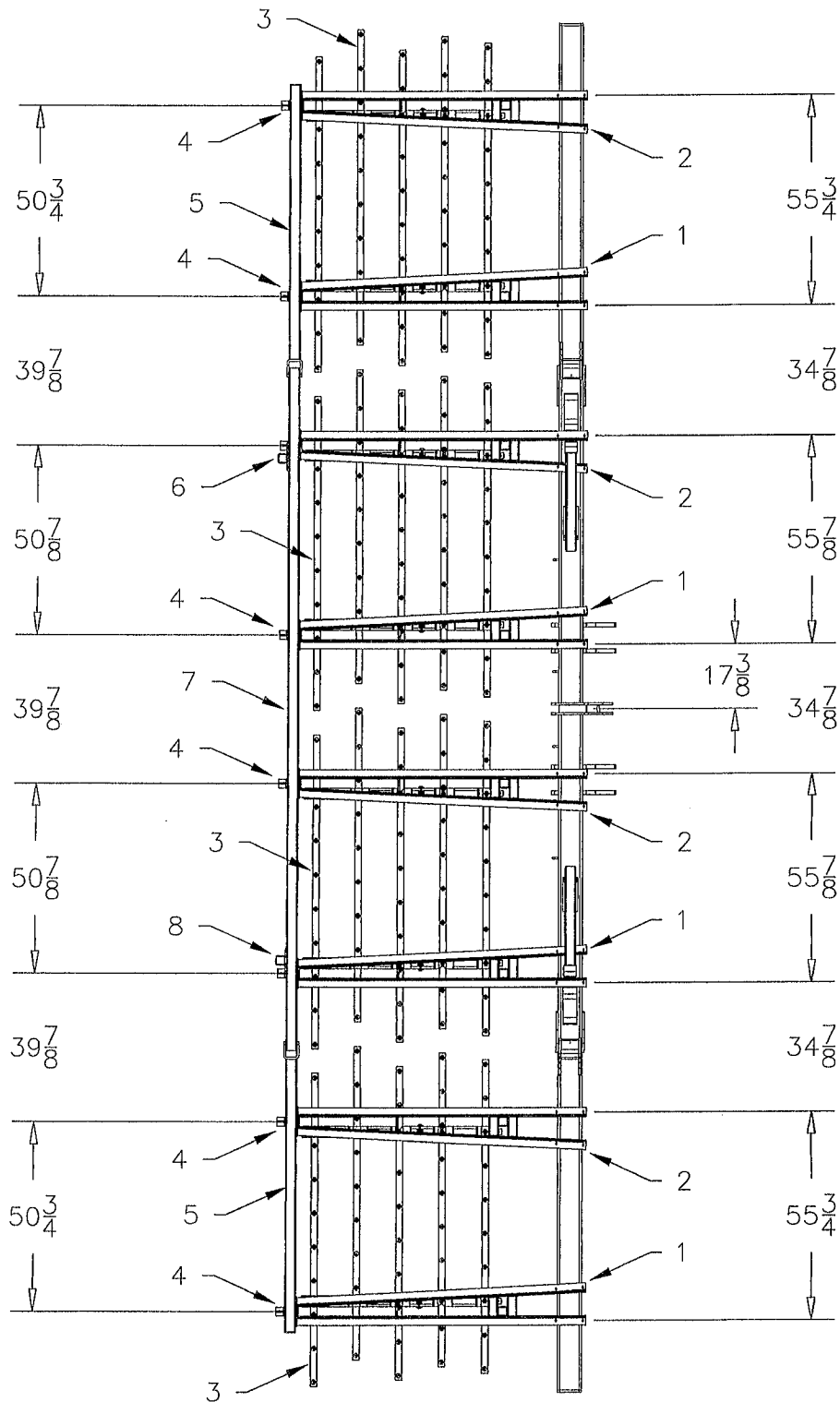


Dwg. No. 00074

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10161	72" ARM (LEFT)	4	6	10153	REAR LOCK/STAND (RH)	1
2	10162	72" ARM (RIGHT)	4	7	10257	HARROW SECTION 7-1/2'	2
3	10261	HARROW SECTION 5'	2	8	10272	CENTER CARRIER BAR	1
4	10152	REAR CHAIN LOCK	6	9	10154	REAR LOCK/STAND (LH)	1
5	10276	WING CARRIER BAR	2				



12 ROW 30"

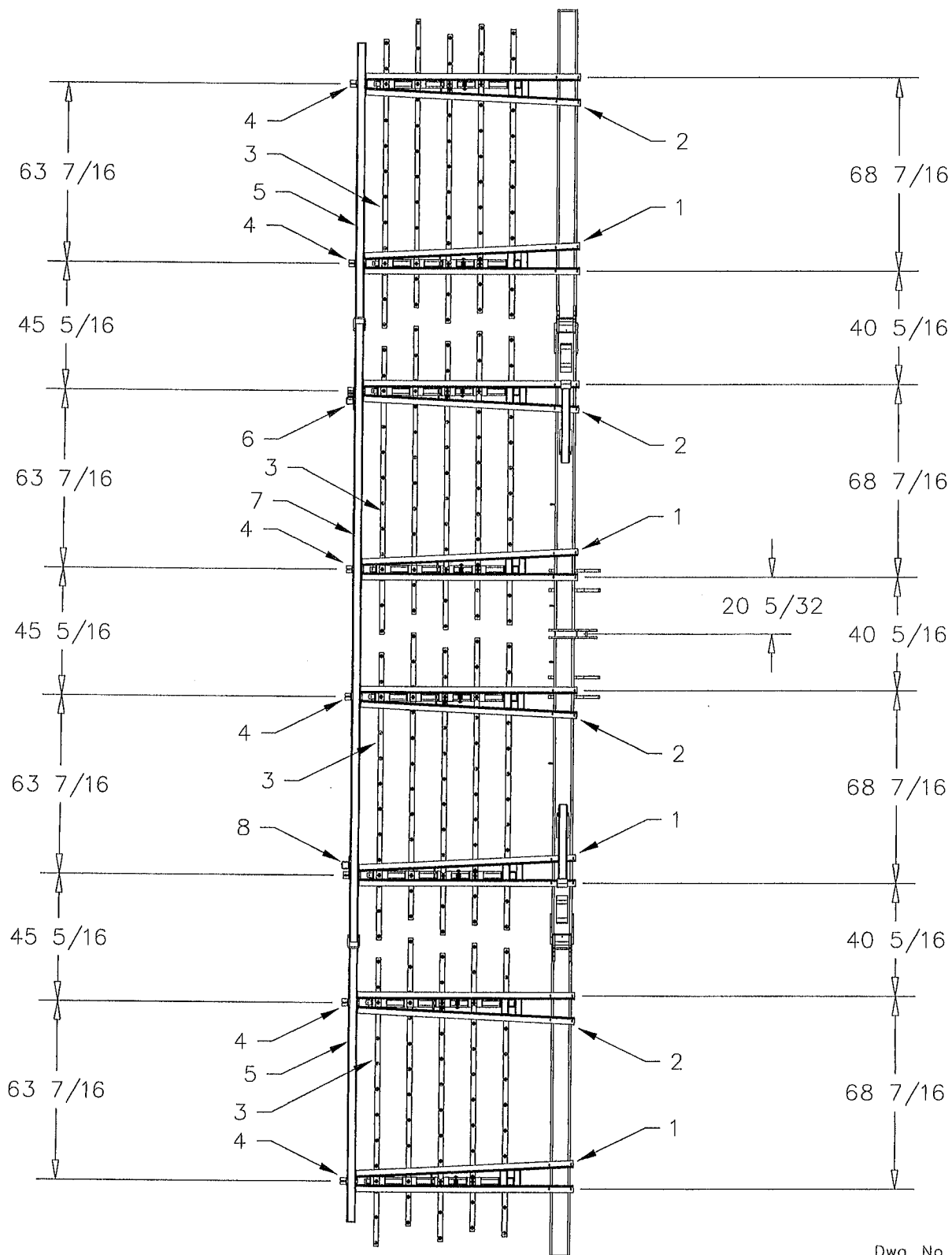


Dwg. No. 00076

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10161	72" ARM (LEFT)	4	5	10278	WING CARRIER BAR	2
2	10162	72" ARM (RIGHT)	4	6	10153	REAR LOCK/STAND (RH)	1
3	10257	HARROW SECTION 7-1/2'	4	7	10272	CENTER CARRIER BAR	1
4	10152	REAR CHAIN LOCK	6	8	10154	REAR LOCK/STAND (LH)	1



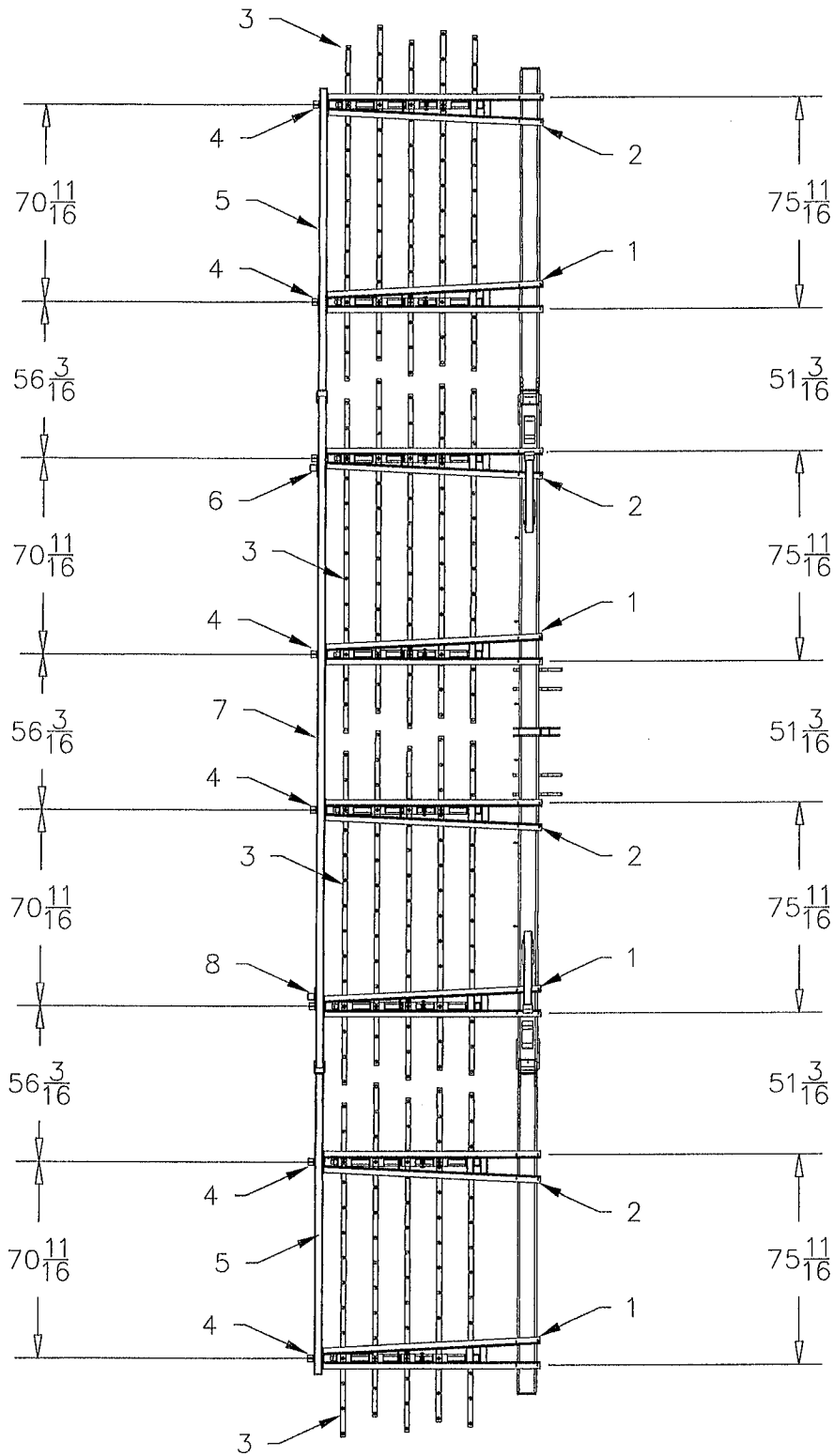
12 ROW 36"



Dwg. No. 00077

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10161	72" ARM (LEFT)	4	5	10279	WING CARRIER BAR	2
2	10162	72" ARM (RIGHT)	4	6	10153	REAR LOCK\STAND (RH)	1
3	10259	HARROW SECTION 9'	4	7	10273	CENTER CARRIER BAR	1
4	10152	REAR CHAIN LOCK	6	8	10154	REAR LOCK/STAND (LH)	1

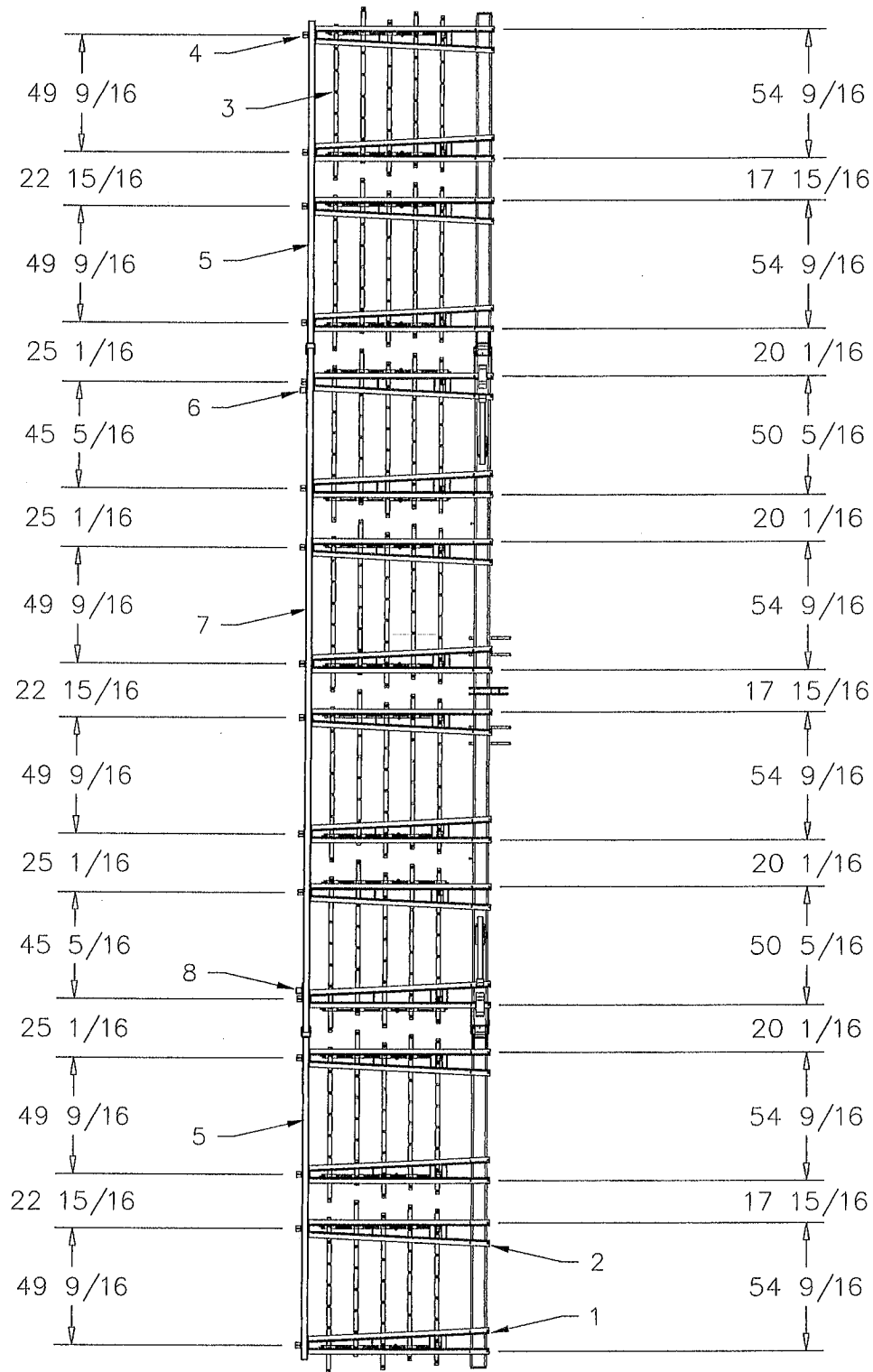
16 ROW 30"



Dwg. No. 00078

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10161	72" ARM (LEFT)	4	5	10280	WING CARRIER BAR	2
2	10162	72" ARM (RIGHT)	4	6	10153	REAR LOCK/STAND (RH)	1
3	10260	HARROW SECTION 10'	4	7	10274	CENTER CARRIER BAR	1
4	10152	REAR CHAIN LOCK	6	8	10154	REAR LOCK/STAND (LH)	1

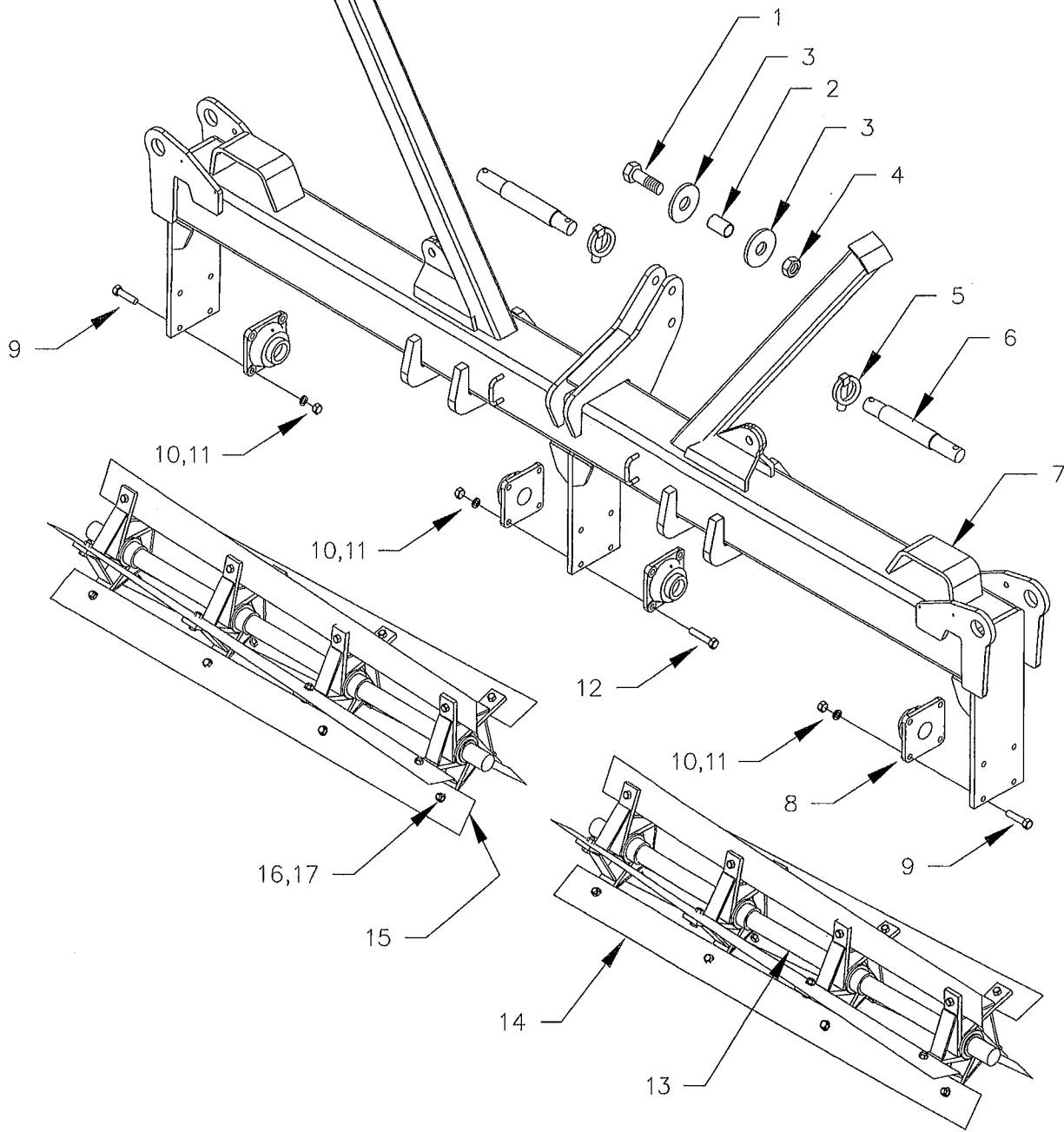
16 ROW 36"



Dwg. No. 00079

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10161	72" ARM (LEFT)	8	5	10281	WING CARRIER BAR	2
2	10162	72" ARM (RIGHT)	8	6	10153	REAR LOCK/STAND (RH)	1
3	10256	HARROW SECTION 6	8	7	10275	CENTER CARRIER BAR	1
4	10152	REAR CHAIN LOCK	14	8	10154	REAR LOCK/STAND (LH)	1

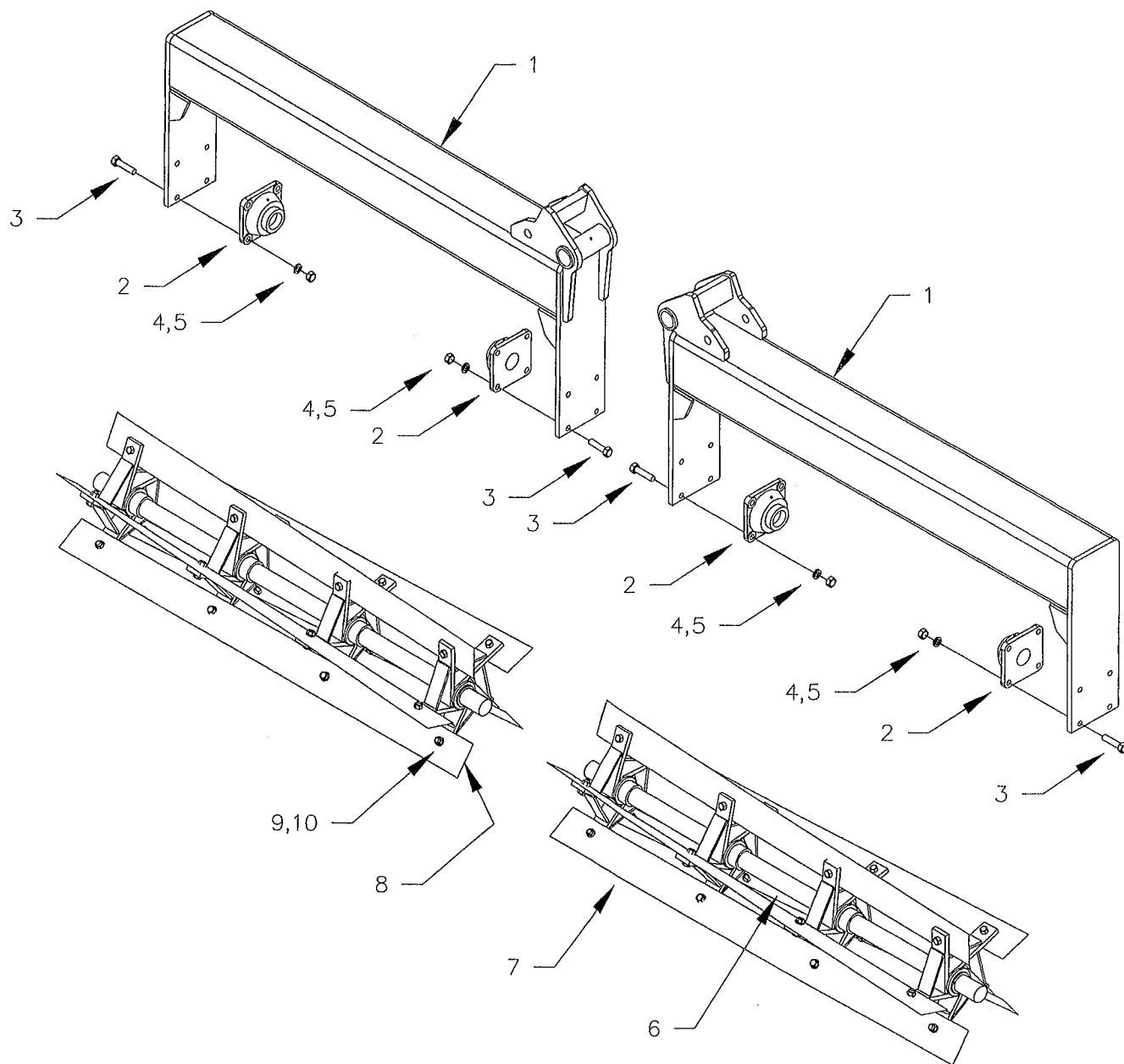
8 ROW 30"



Dwg. No. 00053

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90110	BOLT 1"NC x 4-3/8"	1	10	90123	WASHER 5/8" LOCK	12
2	90109	TOP LINK BUSHING	1	11	90137	NUT 5/8"NC	12
3	90112	WASHER 1" FLAT	2	12	90151	BOLT 5/8"NC x 3"	4
4	90111	NUT 1"NC DEFORMED	1	13	10127	ROTOR 5'	2
5	90115	LYNCH PIN 7/16 x 1-1/2	2	14	10283	BLADE 5'	10
6	90113	HITCH PIN CAT. 2 & 3	2	15	90136	BOLT 1/2"NC x 1-1/2"	40
7	10234	TOOL BAR	1	16	90134	WASHER 1/2" LOCK	40
8	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	4	17	90138	NUT 1/2"NC	40
9	90135	BOLT 5/8"NC x 2-1/2"	8				

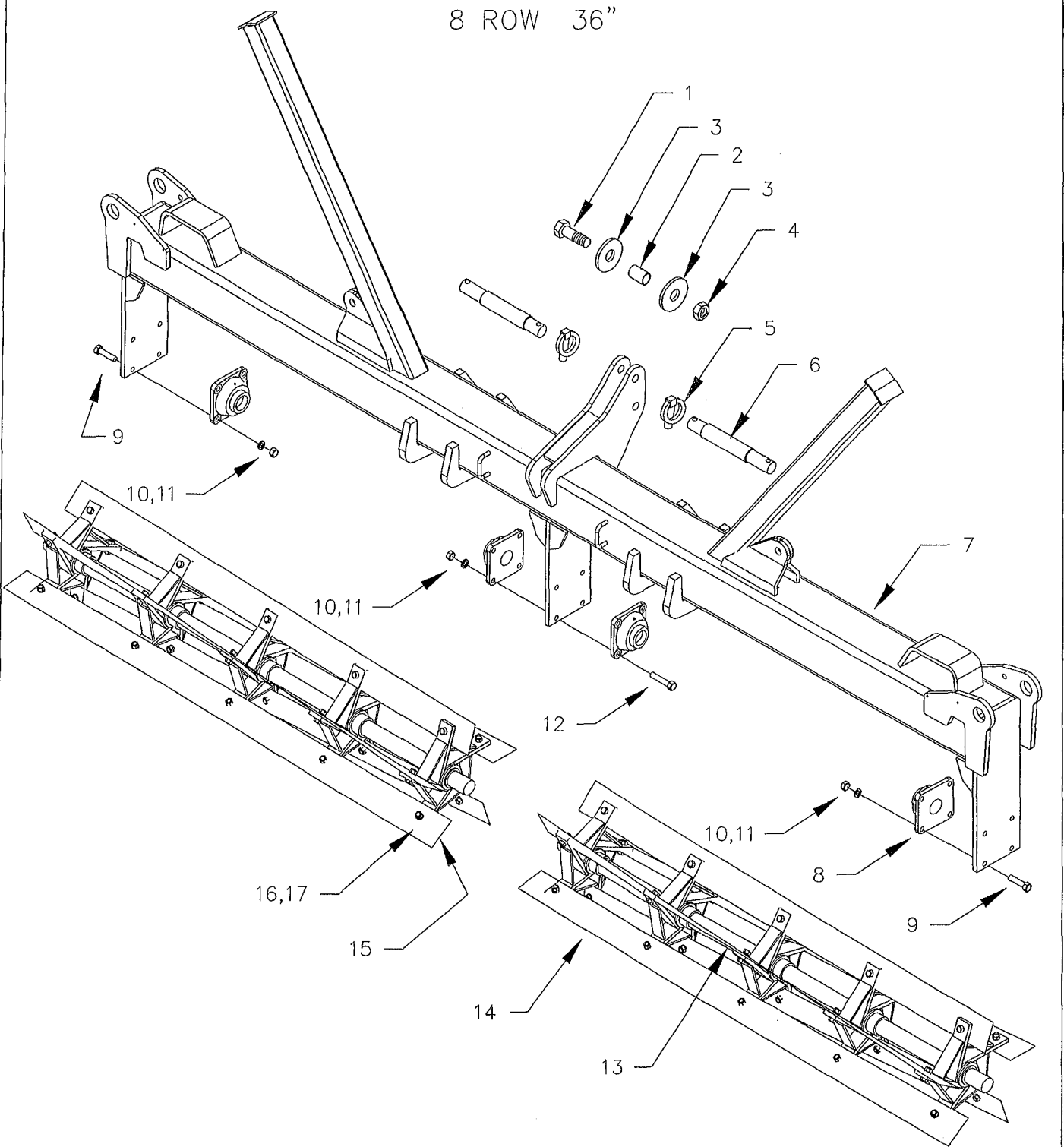
8 ROW 30"



Dwg. No. 00054

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10234	TOOL BAR	2	6	10127	ROTOR 5'	2
2	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	4	7	10283	BLADE 5'	10
3	90135	BOLT 5/8"NC x 2-1/2"	16	8	90136	BOLT 1/2"NC x 1-1/2"	40
4	90123	WASHER 5/8" LOCK	16	9	90134	WASHER 1/2" LOCK	40
5	90137	NUT 5/8"NC	16	10	90138	NUT 1/2"NC	40

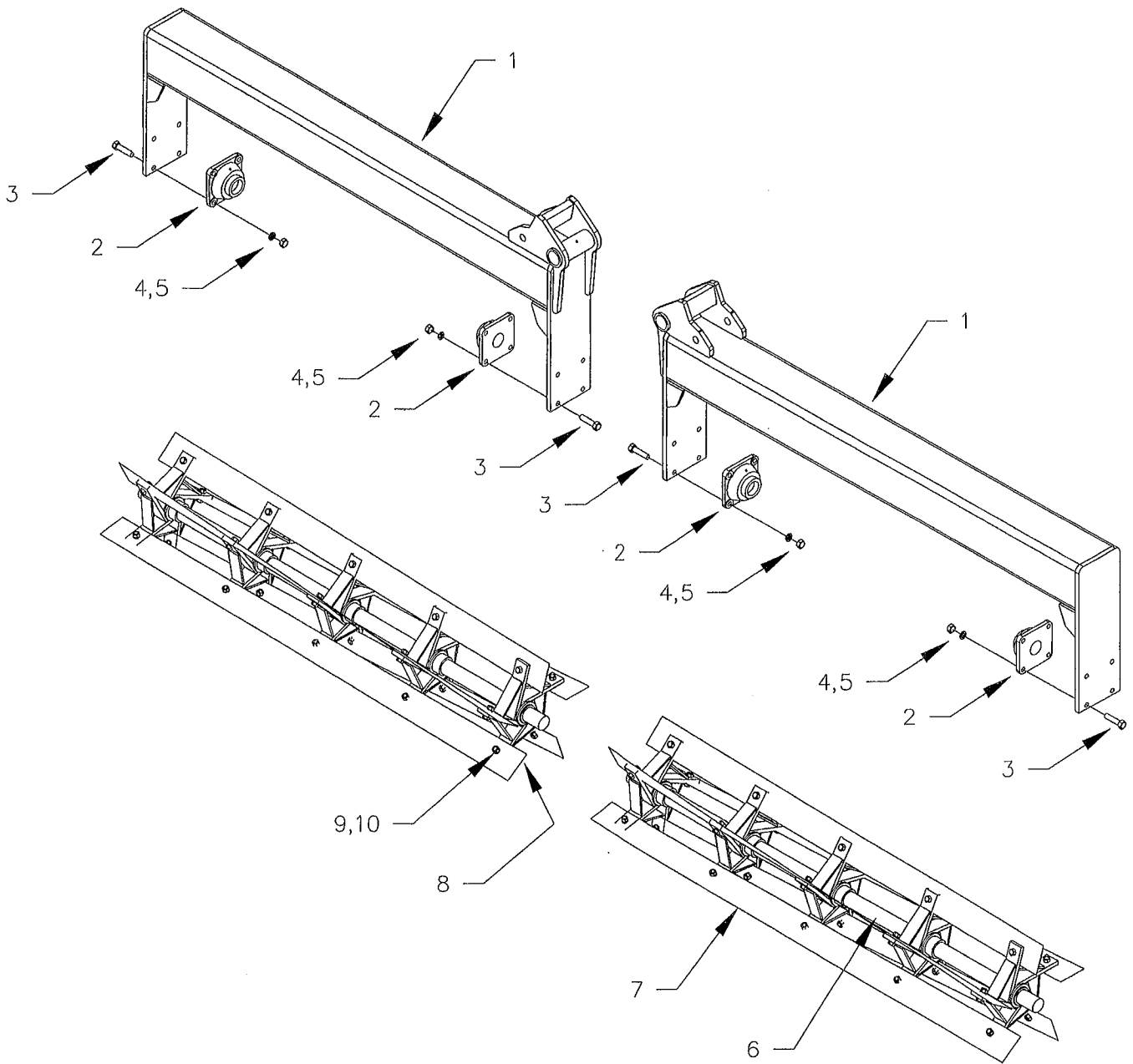
8 ROW 36"



Dwg No. 00057

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90110	BOLT 1"NC x 4-3/8"	1	10	90123	WASHER 5/8" LOCK	12
2	90109	TOP LINK BUSHING	1	11	90137	NUT 5/8"NC	12
3	90112	WASHER 1" FLAT	2	12	90151	BOLT 5/8"NC x 3"	4
4	90111	NUT 1"NC DEFORMED	1	13	10128	ROTOR 6'	2
5	90115	LYNCH PIN 7/16 x 1-1/2	2	14	10284	BLADE 6'	10
6	90113	HITCH PIN CAT. 2 & 3	2	15	90136	BOLT 1/2"NC x 1-1/2"	50
7	10235	TOOL BAR	1	16	90134	WASHER 1/2" LOCK	50
8	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	4	17	90138	NUT 1/2"NC	50
9	90135	BOLT 5/8"NC x 2-1/2"	8				

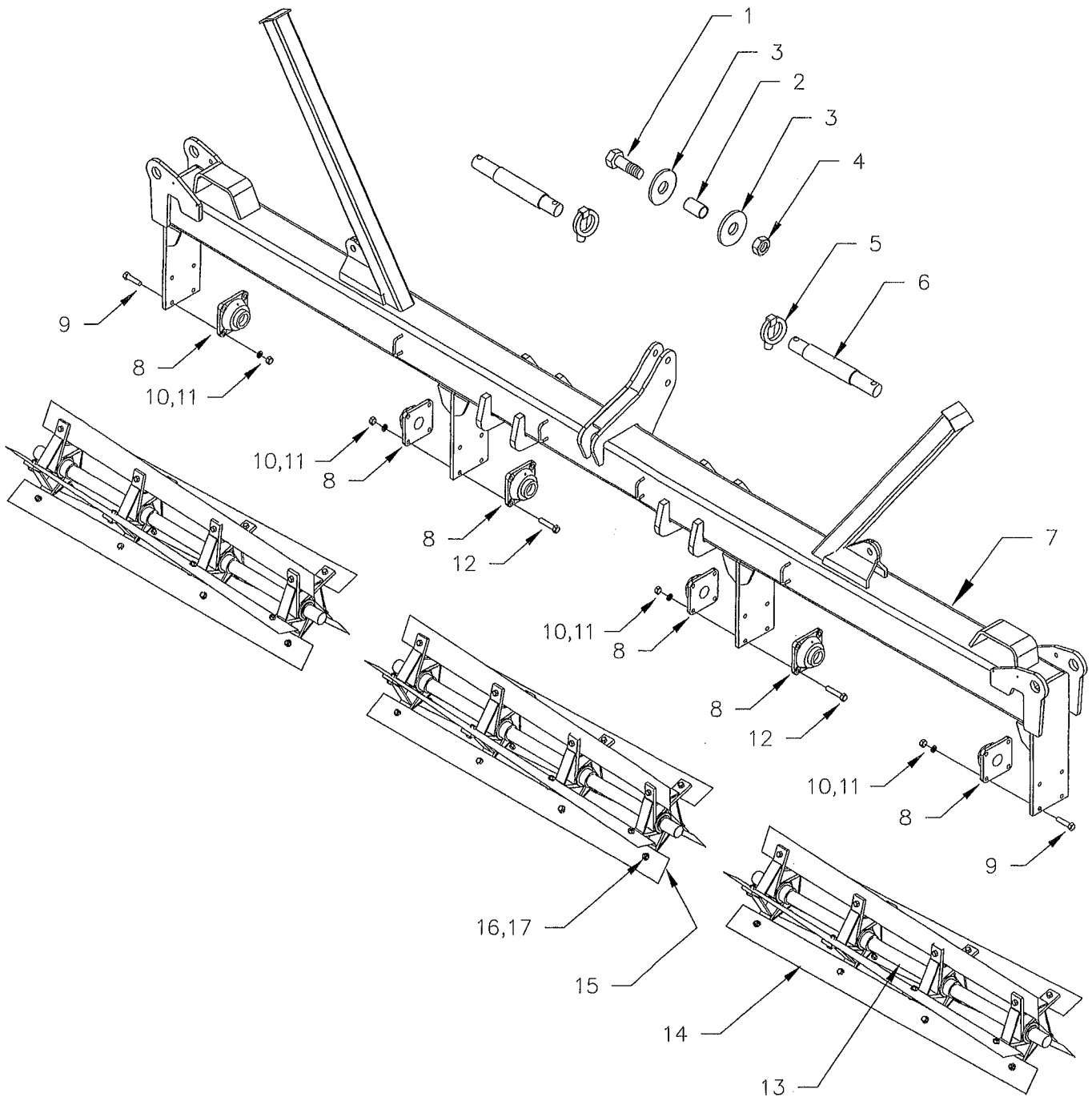
8 ROW 36"



Dwg. No. 00058

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10220	TOOL BAR	2	6	10128	ROTOR 6'	2
2	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	4	7	10284	BLADE 6'	10
3	90135	BOLT 5/8"NC x 2-1/2"	16	8	90136	BOLT 1/2"NC x 1-1/2"	50
4	90123	WASHER 5/8" LOCK	16	9	90134	WASHER 1/2" LOCK	50
5	90137	NUT 5/8"NC	16	10	90138	NUT 1/2"NC	50

10 ROW 30"

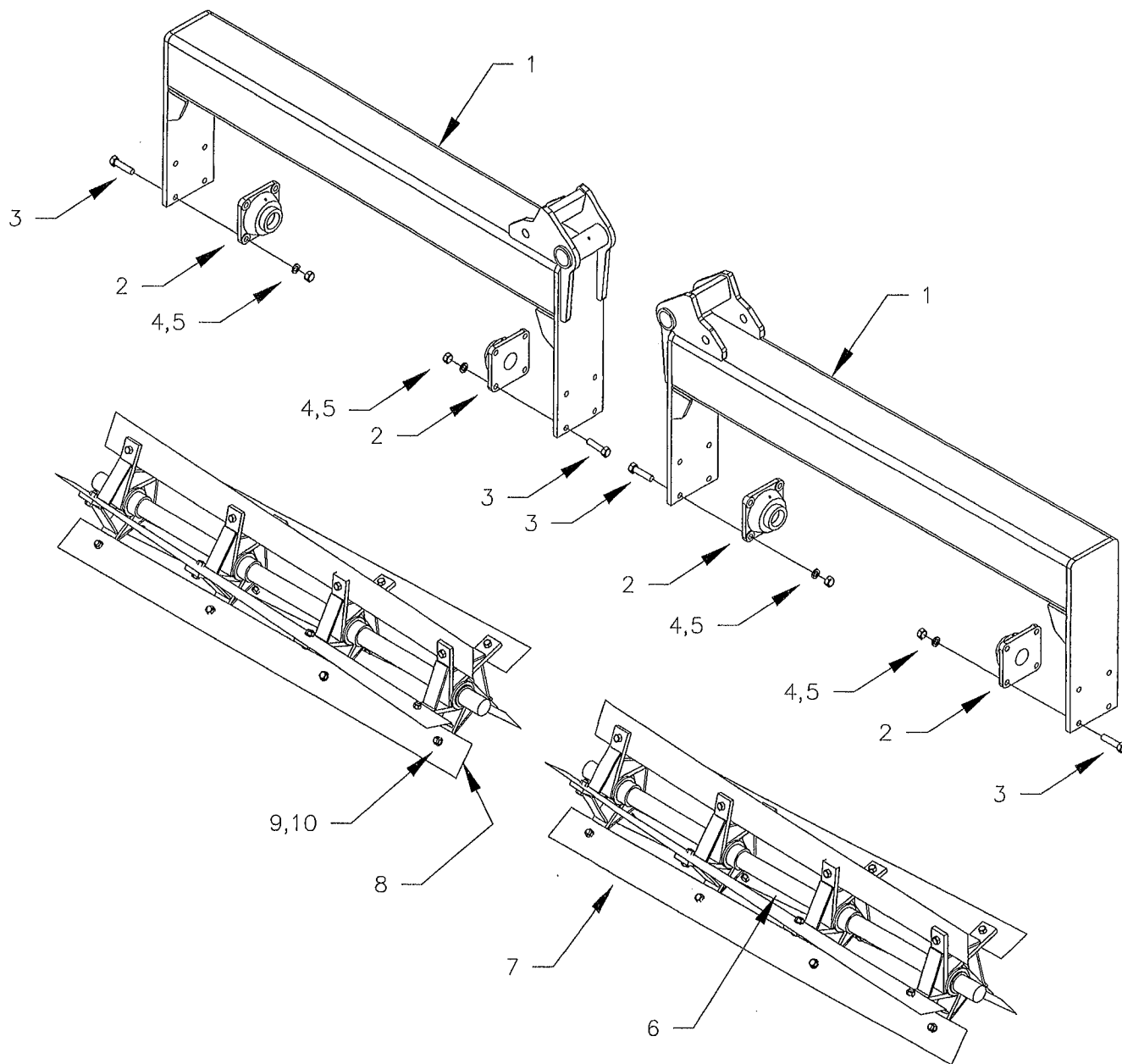


Dwg. No. 00059

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90110	BOLT 1"NC x 4-3/8"	1	10	90123	WASHER 5/8" LOCK	16
2	90109	TOP LINK BUSHING	1	11	90137	NUT 5/8"NC	16
3	90112	WASHER 1" FLAT	2	12	90151	BOLT 5/8"NC x 3"	8
4	90111	NUT 1"NC DEFORMED	1	13	10127	ROTOR 5'	3
5	90115	LYNCH PIN 7/16 x 1-1/2	2	14	10283	BLADE 5'	15
6	90113	HITCH PIN CAT. 2 & 3	2	15	90136	BOLT 1/2"NC x 1-1/2"	60
7	10238	TOOL BAR	1	16	90134	WASHER 1/2" LOCK	60
8	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	6	17	90138	NUT 1/2"NC	60
9	90135	BOLT 5/8"NC x 2-1/2"	8				



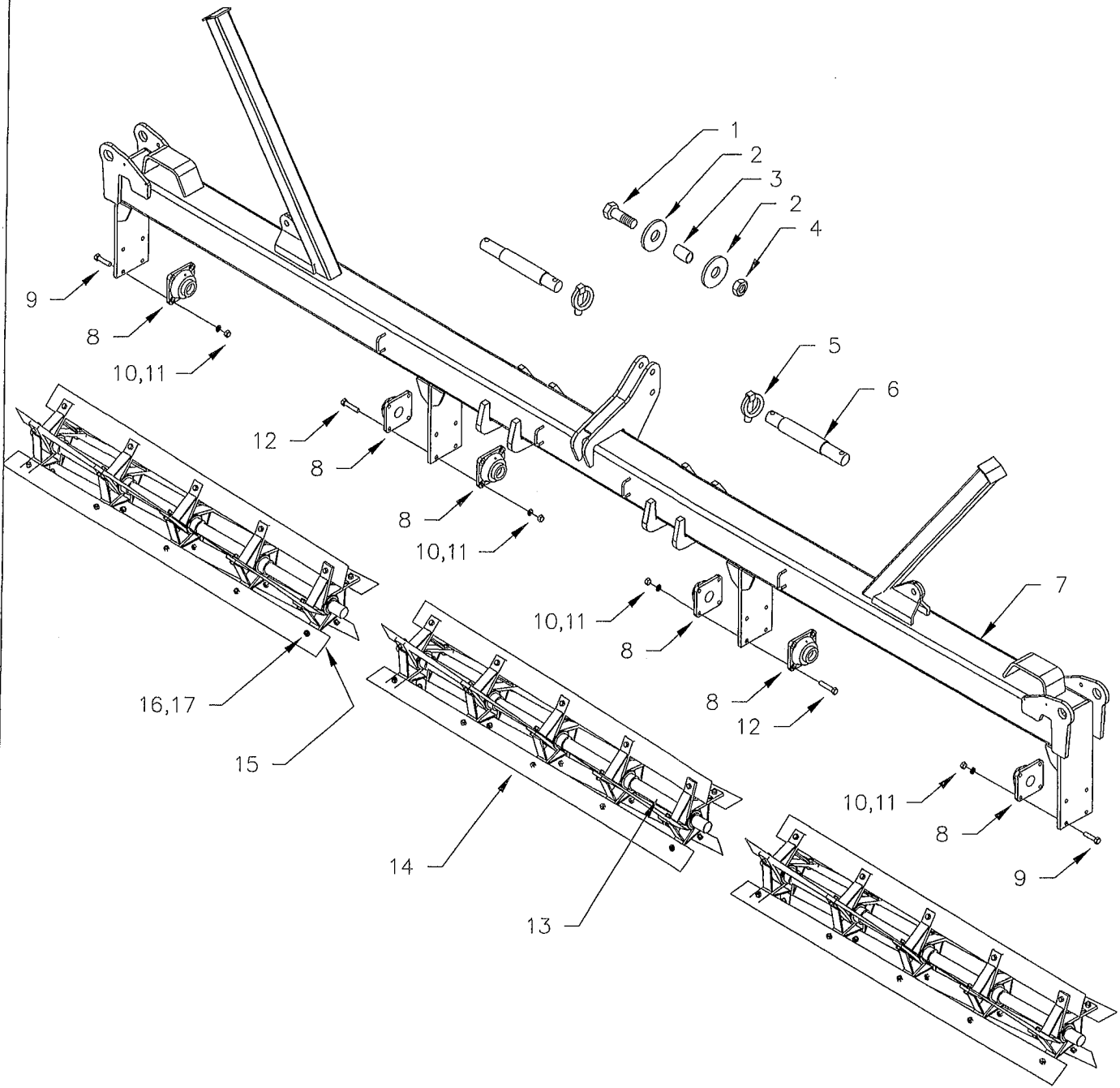
10 ROW 30"



Dwg. No. 00060

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10219	TOOL BAR	2	6	10127	ROTOR 5'	2
2	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	4	7	10283	BLADE 5'	10
3	90135	BOLT 5/8"NC x 2-1/2"	16	8	90136	BOLT 1/2"NC x 1-1/2"	40
4	90123	WASHER 5/8" LOCK	16	9	90134	WASHER 1/2" LOCK	40
5	90137	NUT 5/8"NC	16	10	90138	NUT 1/2"NC	40

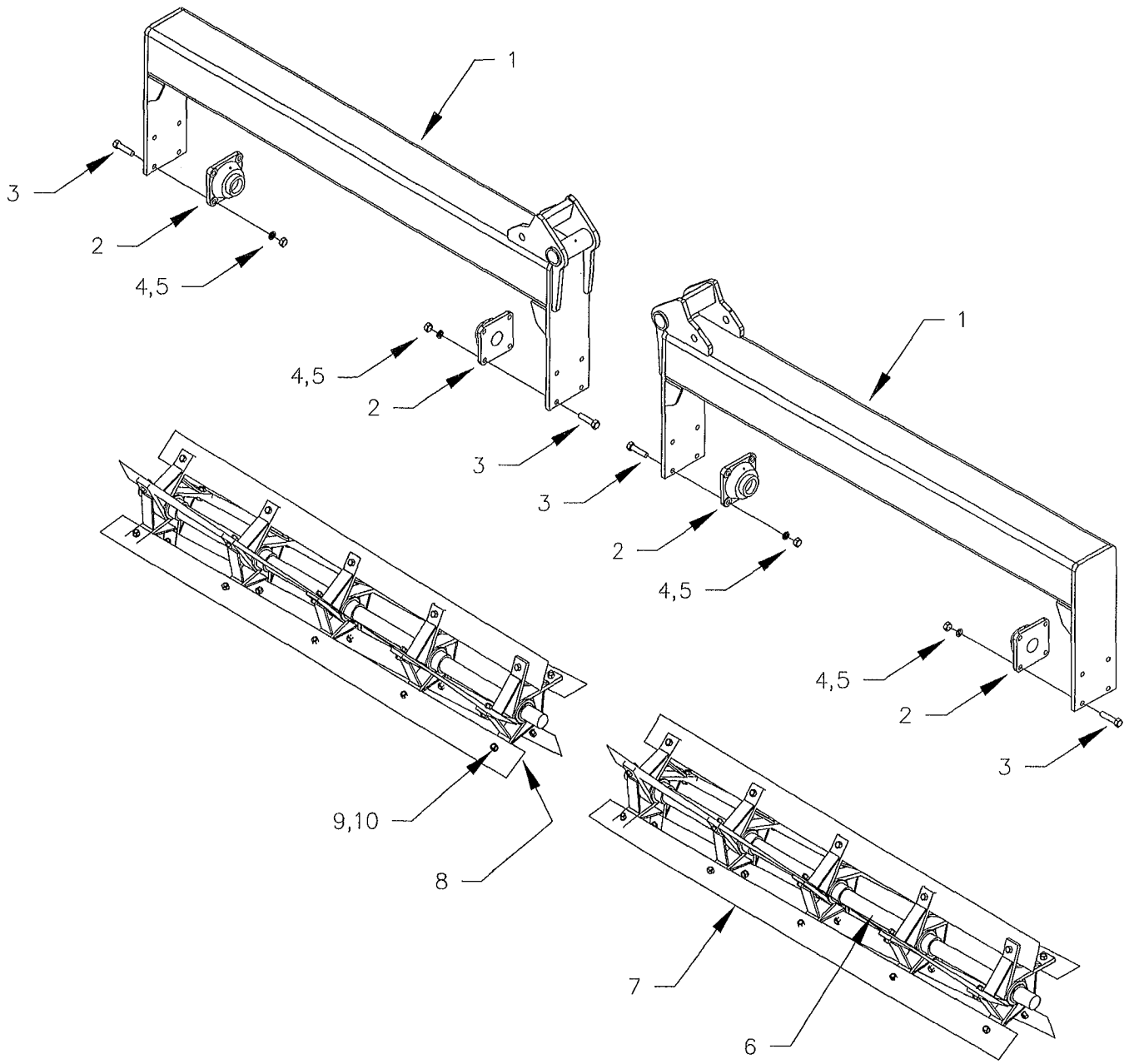
10 ROW 36"



Dwg No. 00061

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90110	BOLT 1"NC x 4-3/8"	1	10	90123	WASHER 5/8" LOCK	16
2	90109	TOP LINK BUSHING	1	11	90137	NUT 5/8"NC	16
3	90112	WASHER 1" FLAT	2	12	90151	BOLT 5/8"NC x 3"	8
4	90111	NUT 1"NC DEFORMED	1	13	10128	ROTOR 6'	3
5	90115	LYNCH PIN 7/16 x 1-1/2	2	14	10284	BLADE 6'	15
6	90113	HITCH PIN CAT. 2 & 3	2	15	90136	BOLT 1/2"NC x 1-1/2"	75
7	10239	TOOL BAR	1	16	90134	WASHER 1/2" LOCK	75
8	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	6	17	90138	NUT 1/2"NC	75
9	90135	BOLT 5/8"NC x 2-1/2"	8				

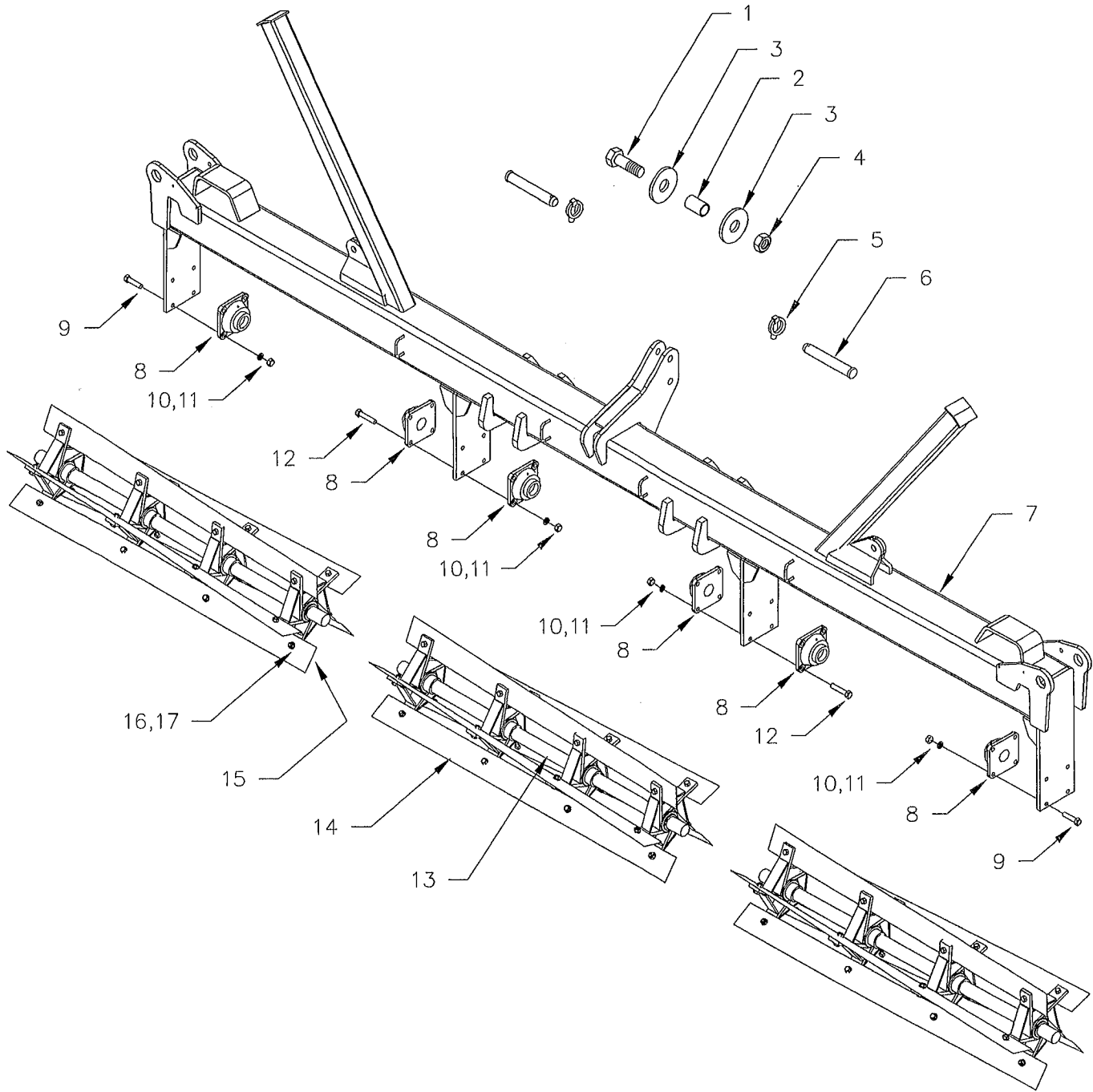
10 ROW 36"



Dwg. No. 00062

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10220	TOOL BAR	2	6	10128	ROTOR 6'	2
2	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	4	7	10284	BLADE 6'	10
3	90135	BOLT 5/8"NC x 2-1/2"	16	8	90136	BOLT 1/2"NC x 1-1/2"	50
4	90123	WASHER 5/8" LOCK	16	9	90134	WASHER 1/2" LOCK	50
5	90137	NUT 5/8"NC	16	10	90138	NUT 1/2"NC	50

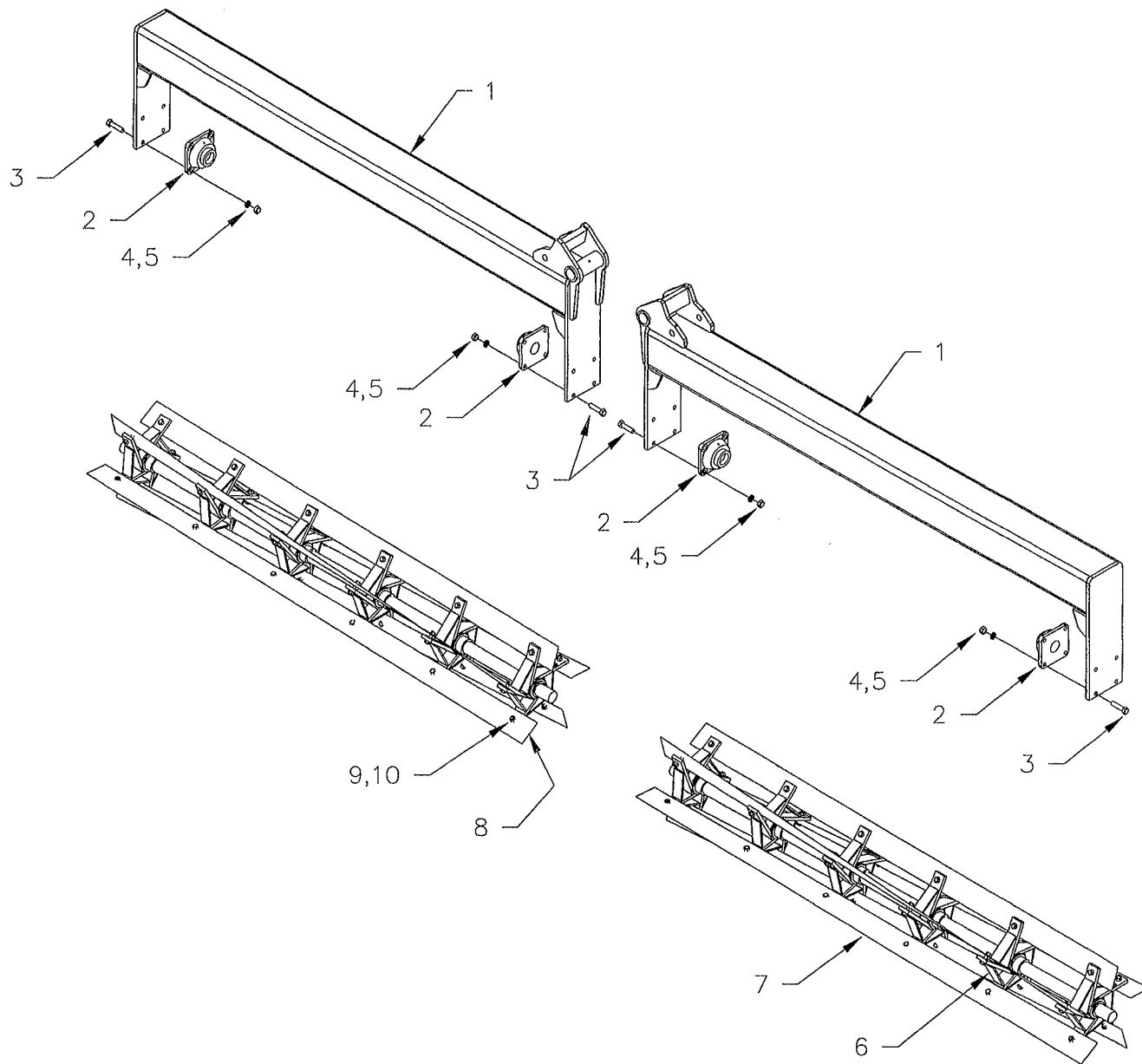
12 ROW 30"



Dwg. No. 00063

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90110	BOLT 1"NC x 4-3/8"	1	10	90123	WASHER 5/8" LOCK	16
2	90109	TOP LINK BUSHING	1	11	90137	NUT 5/8"NC	16
3	90112	WASHER 1" FLAT	2	12	90151	BOLT 5/8"NC x 3"	8
4	90111	NUT 1"NC DEFORMED	1	13	10127	ROTOR 5'	3
5	90115	LYNCH PIN 7/16 x 1-1/2	2	14	10283	BLADE 5'	15
6	90114	HITCH PIN CAT. 3	2	15	90136	BOLT 1/2"NC x 1-1/2"	60
7	10242	TOOL BAR	1	16	90134	WASHER 1/2" LOCK	60
8	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	6	17	90138	NUT 1/2"NC	60
9	90135	BOLT 5/8"NC x 2-1/2"	8				

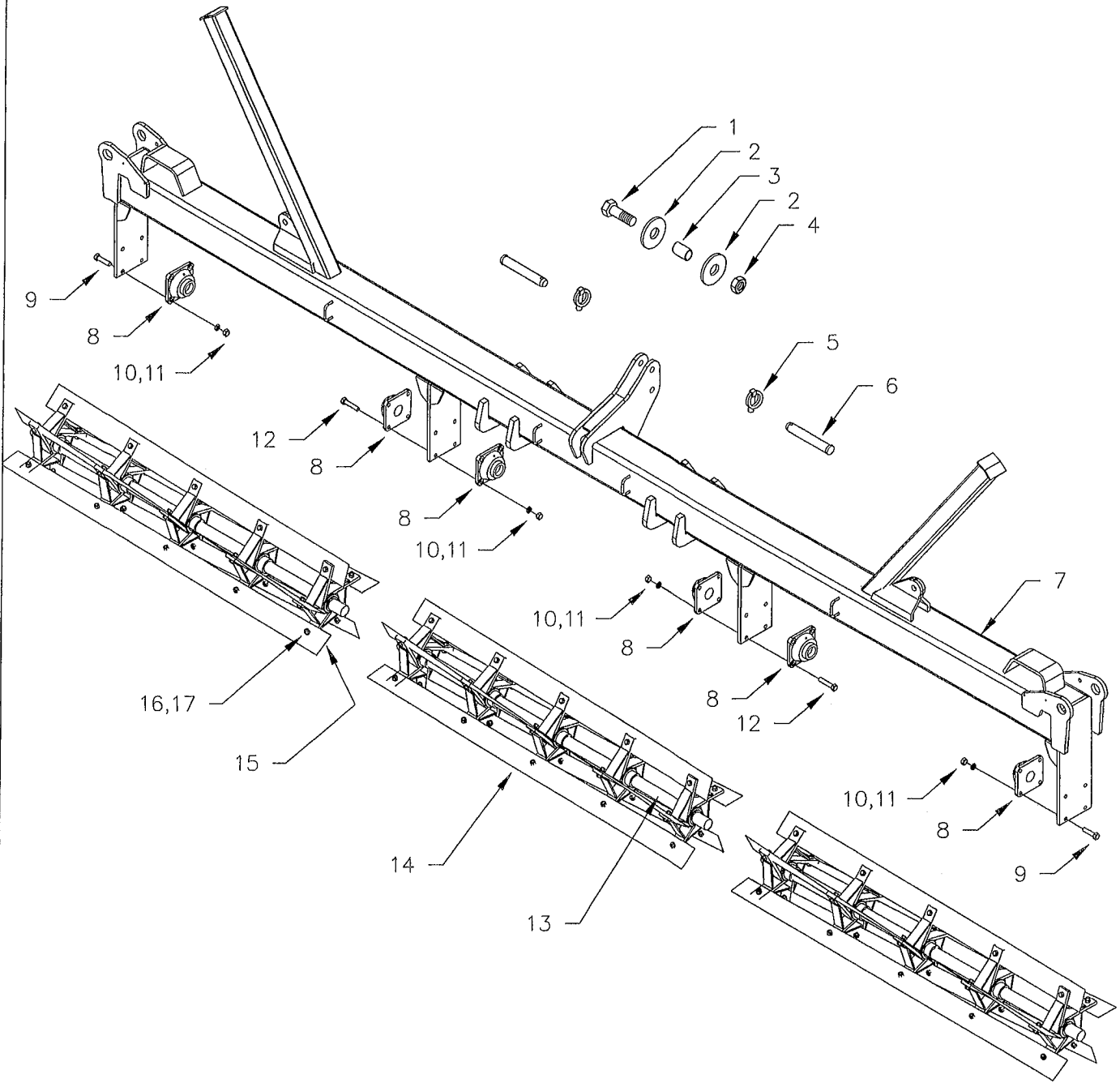
12 ROW 30"



Dwg. No. 00064

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10221	TOOL BAR	2	6	10129	ROTOR 7-1/2'	2
2	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	4	7	10285	BLADE 7-1/2'	10
3	90135	BOLT 5/8"NC x 2-1/2"	16	8	90136	BOLT 1/2"NC x 1-1/2"	60
4	90123	WASHER 5/8" LOCK	16	9	90134	WASHER 1/2" LOCK	60
5	90137	NUT 5/8"NC	16	10	90138	NUT 1/2"NC	60

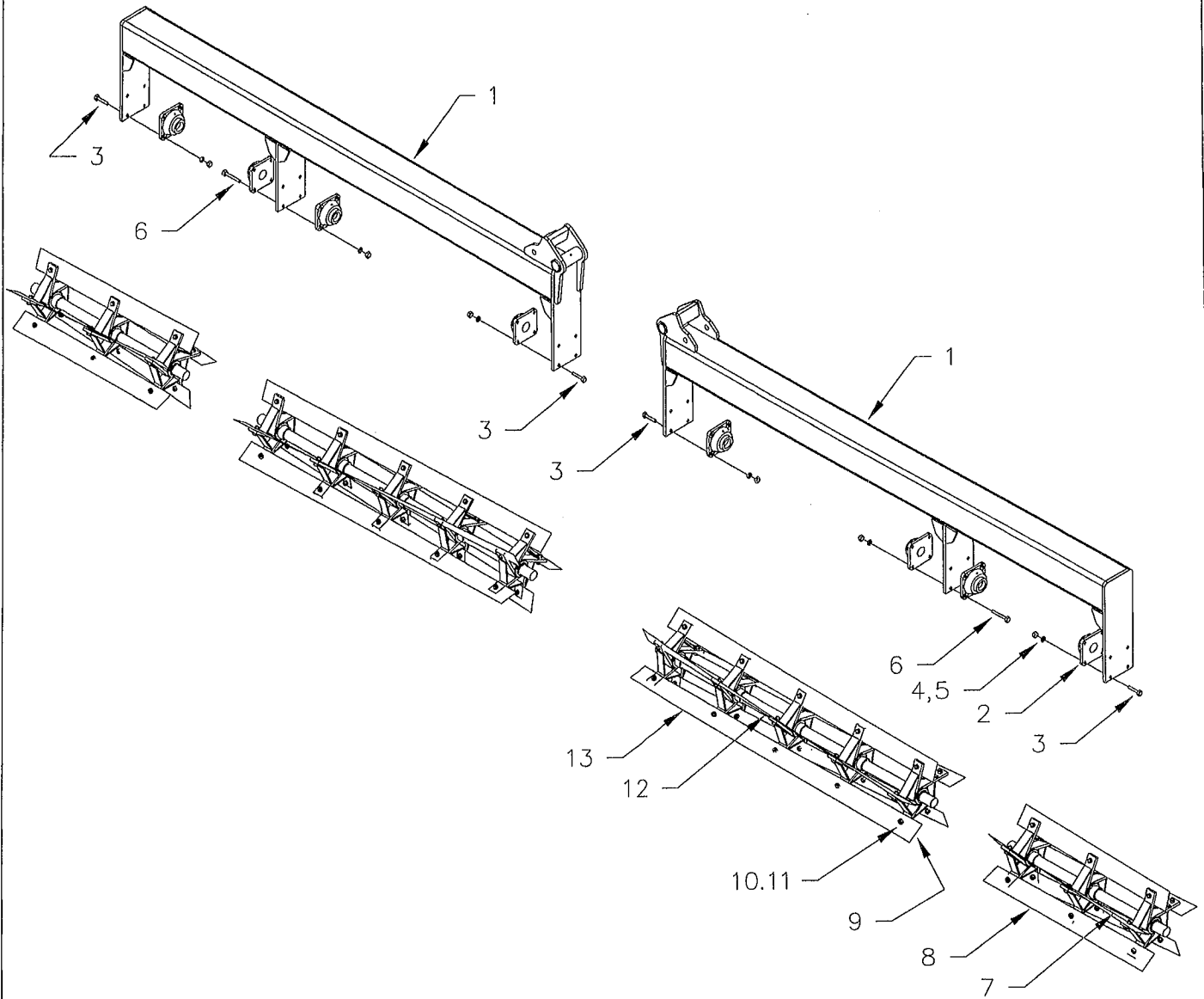
12 ROW 36"



Dwg No. 00065

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90110	BOLT 1"NC x 4-3/8"	1	10	90123	WASHER 5/8" LOCK	16
2	90109	TOP LINK BUSHING	1	11	90137	NUT 5/8"NC	16
3	90112	WASHER 1" FLAT	2	12	90151	BOLT 5/8"NC x 3"	8
4	90111	NUT 1"NC DEFORMED	1	13	10128	ROTOR 6'	3
5	90115	LYNCH PIN 7/16 x 1-1/2	2	14	10284	BLADE 6'	15
6	90114	HITCH PIN CAT. 3	2	15	90136	BOLT 1/2"NC x 1-1/2"	75
7	10243	TOOL BAR	1	16	90134	WASHER 1/2" LOCK	75
8	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	6	17	90138	NUT 1/2"NC	75
9	90135	BOLT 5/8"NC x 2-1/2"	8				

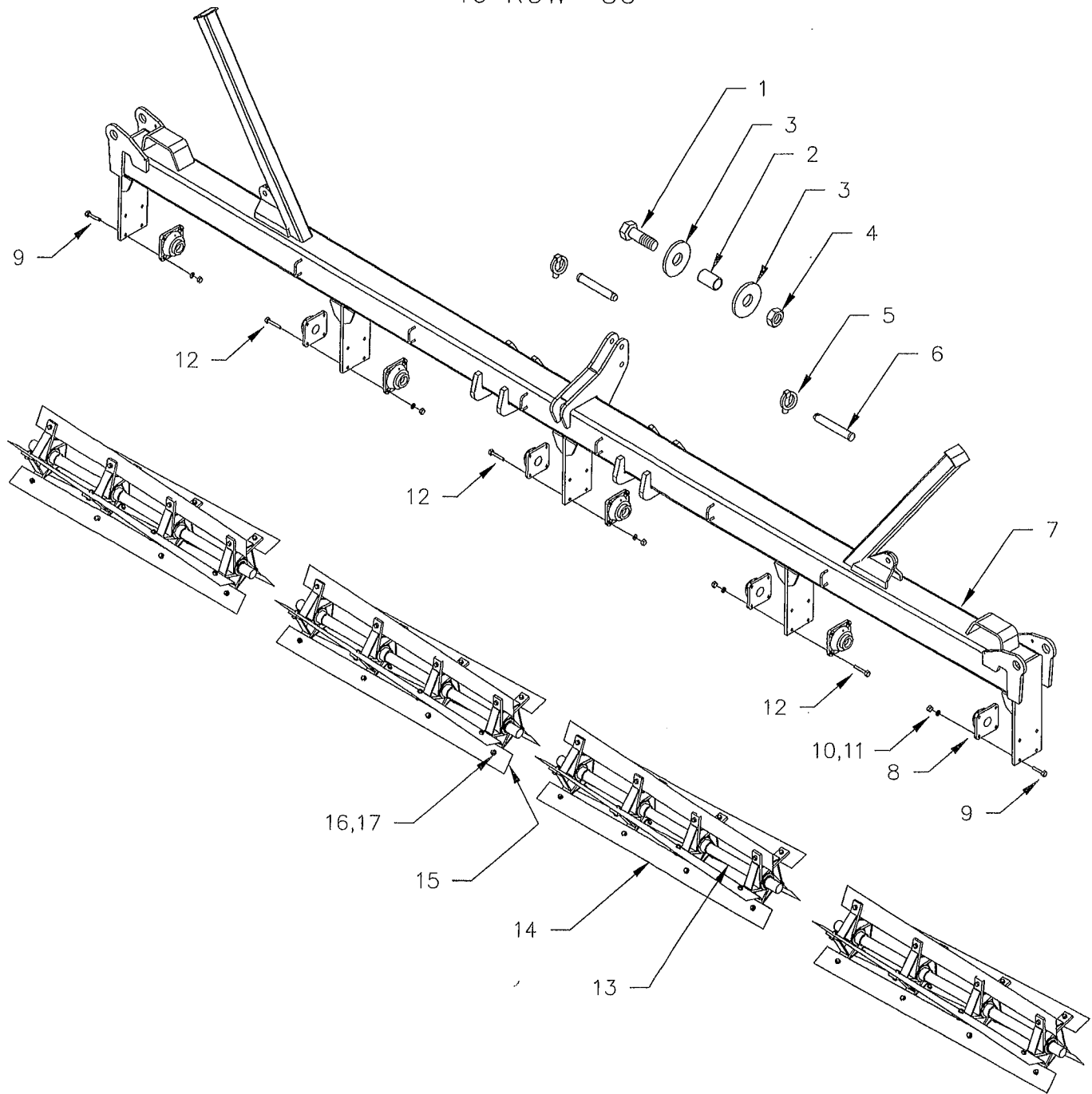
12 ROW 36"



Dwg. No. 00066

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10222	TOOL BAR	2	7	10126	ROTOR 3'	2
2	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	8	8	10282	BLADE 3'	10
3	90135	BOLT 5/8"NC x 2-1/2"	16	9	90136	BOLT 1/2"NC x 1-1/2"	80
4	90123	WASHER 5/8" LOCK	24	10	90134	WASHER 1/2" LOCK	80
5	90137	NUT 5/8"NC	24	11	90138	NUT 1/2"NC	80
6	90151	BOLT 5/8"NC x 3"	8	12	10128	ROTOR 6'	2
				13	10284	BLADE 6'	10

16 ROW 30"

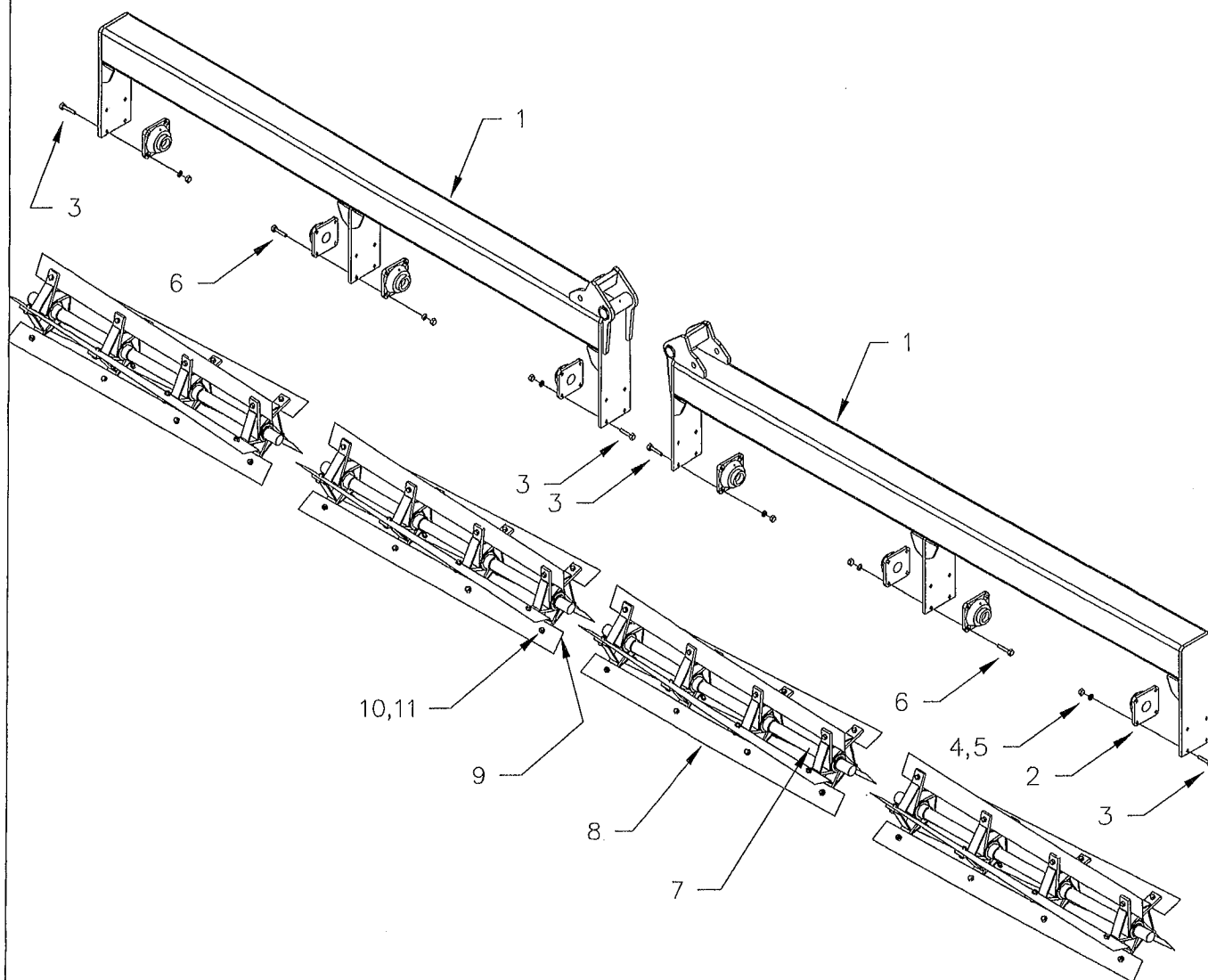


Dwg. No. 00067

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90110	BOLT 1"NC x 4-3/8"	1	10	90123	WASHER 5/8" LOCK	20
2	90109	TOP LINK BUSHING	1	11	90137	NUT 5/8"NC	20
3	90112	WASHER 1" FLAT	2	12	90151	BOLT 5/8"NC x 3"	12
4	90111	NUT 1"NC DEFORMED	1	13	10127	ROTOR 5'	4
5	90115	LYNCH PIN 7/16 x 1-1/2	2	14	10283	BLADE 5'	20
6	90114	HITCH PIN CAT. 3	2	15	90136	BOLT 1/2"NC x 1-1/2"	80
7	10246	TOOL BAR	1	16	90134	WASHER 1/2" LOCK	80
8	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	8	17	90138	NUT 1/2"NC	80
9	90135	BOLT 5/8"NC x 2-1/2"	8				



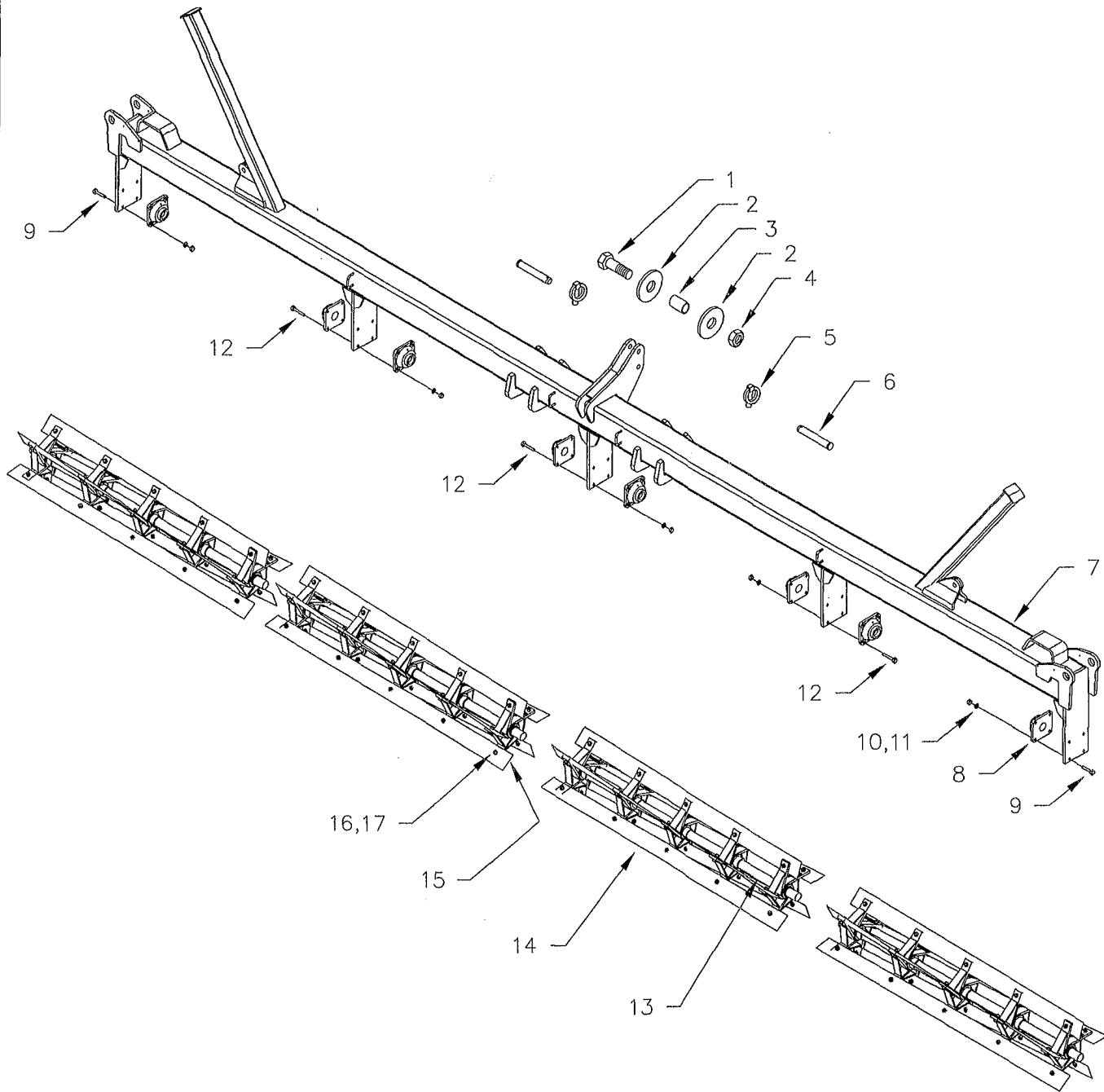
16 ROW 30"



Dwg. No. 00068

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10223	TOOL BAR	2	7	10127	ROTOR 5'	4
2	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	8	8	10283	BLADE 5'	20
3	90135	BOLT 5/8"NC x 2-1/2"	16	9	90136	BOLT 1/2"NC x 1-1/2"	80
4	90123	WASHER 5/8" LOCK	24	10	90134	WASHER 1/2" LOCK	80
5	90137	NUT 5/8"NC	24	11	90138	NUT 1/2"NC	80
6	90151	BOLT 5/8"NC x 3"	8				

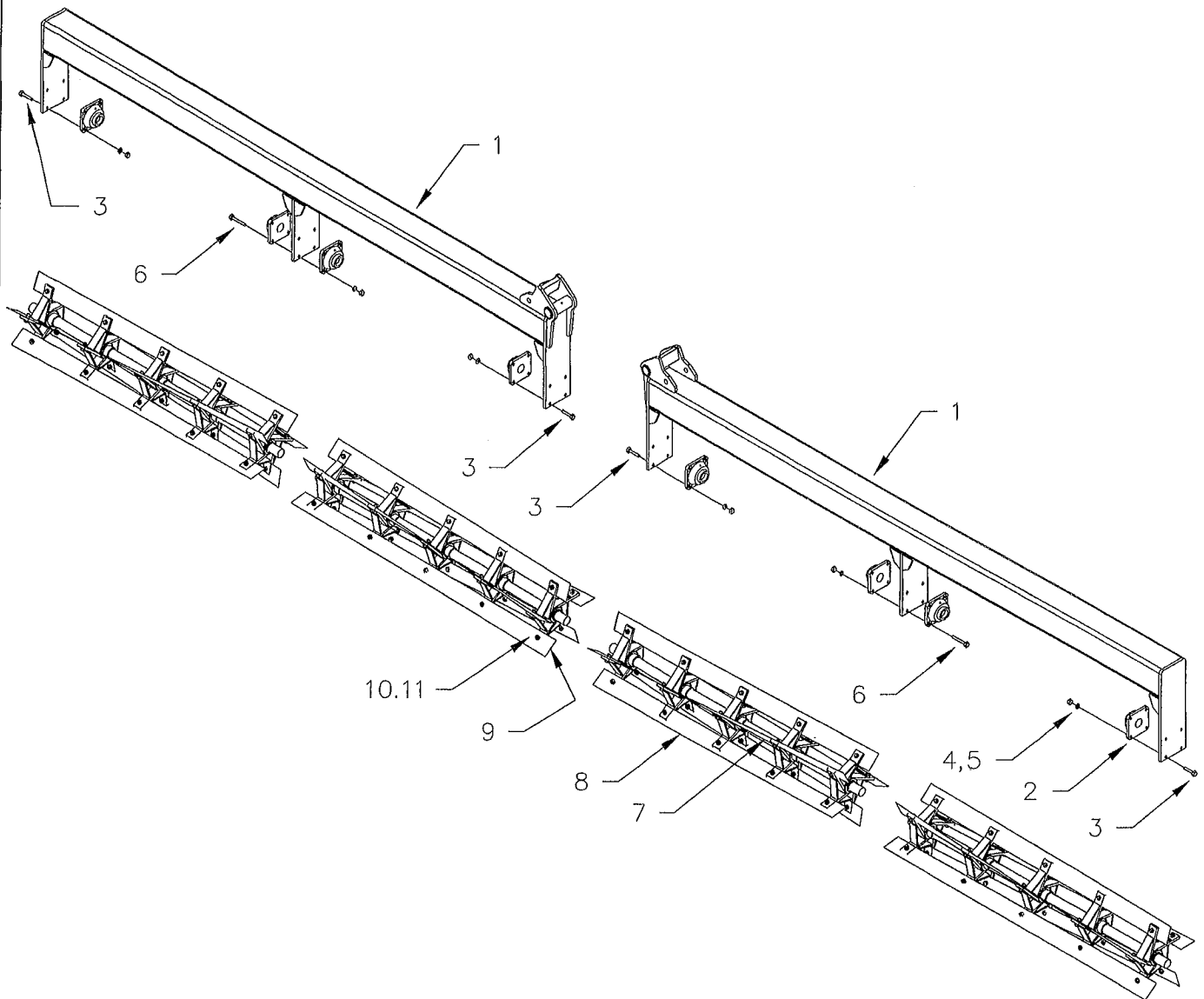
16 ROW 36"



Dwg No. 00069

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90110	BOLT 1"NC x 4-3/8"	1	10	90123	WASHER 5/8" LOCK	20
2	90109	TOP LINK BUSHING	1	11	90137	NUT 5/8"NC	20
3	90112	WASHER 1" FLAT	2	12	90151	BOLT 5/8"NC x 3"	12
4	90111	NUT 1"NC DEFORMED	1	13	10128	ROTOR 6'	4
5	90115	LYNCH PIN 7/16 x 1-1/2	2	14	10284	BLADE 6'	20
6	90114	HITCH PIN CAT. 3	2	15	90136	BOLT 1/2"NC x 1-1/2"	100
7	10247	TOOL BAR	1	16	90134	WASHER 1/2" LOCK	100
8	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	8	17	90138	NUT 1/2"NC	100
9	90135	BOLT 5/8"NC x 2-1/2"	8				

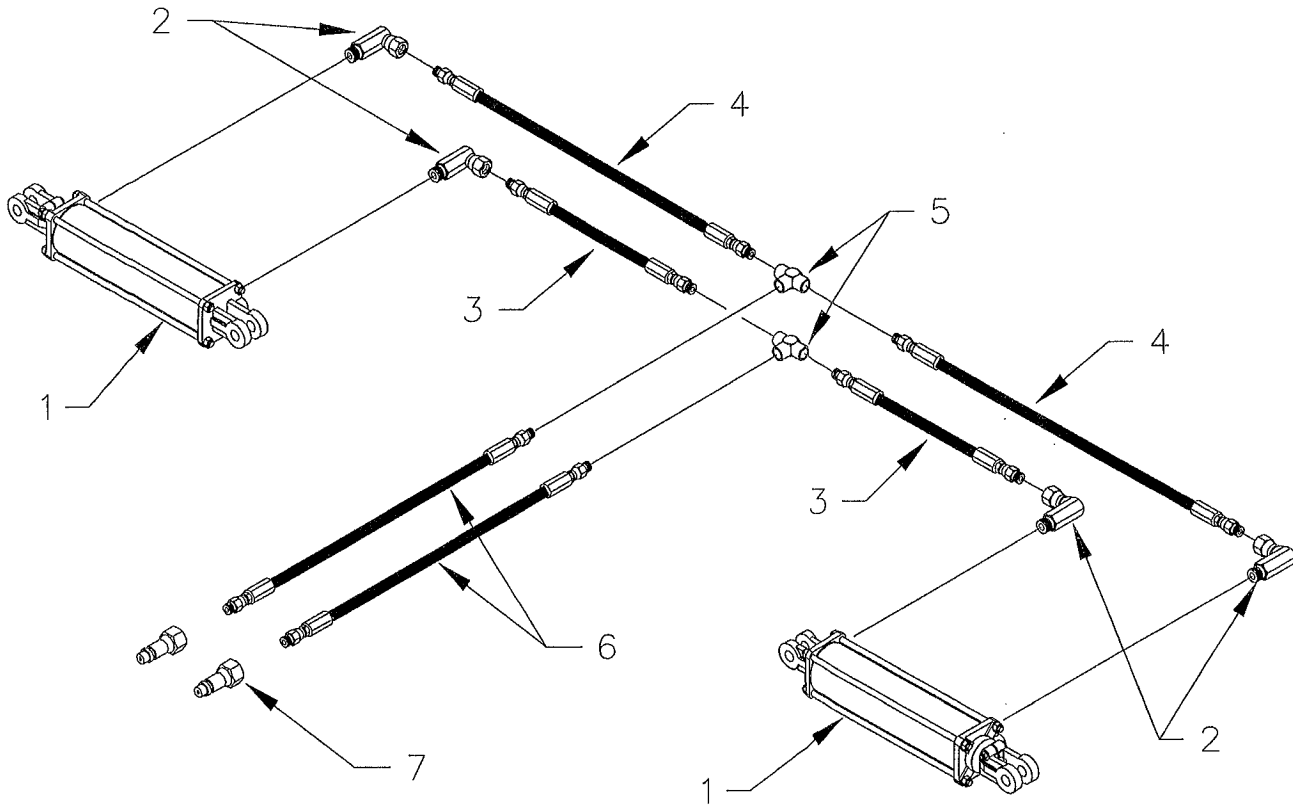
16 ROW 36"



Dwg. No. 00070

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10224	TOOL BAR	2	7	10128	ROTOR 6'	4
2	10125	BEARING BLOCK w/LOCK COLLAR & ZERK	8	8	10284	BLADE 6'	20
3	90135	BOLT 5/8"NC x 2-1/2"	16	9	90136	BOLT 1/2"NC x 1-1/2"	100
4	90123	WASHER 5/8" LOCK	24	10	90134	WASHER 1/2" LOCK	100
5	90137	NUT 5/8"NC	24	11	90138	NUT 1/2"NC	100
6	90151	BOLT 5/8"NC x 3"	8				

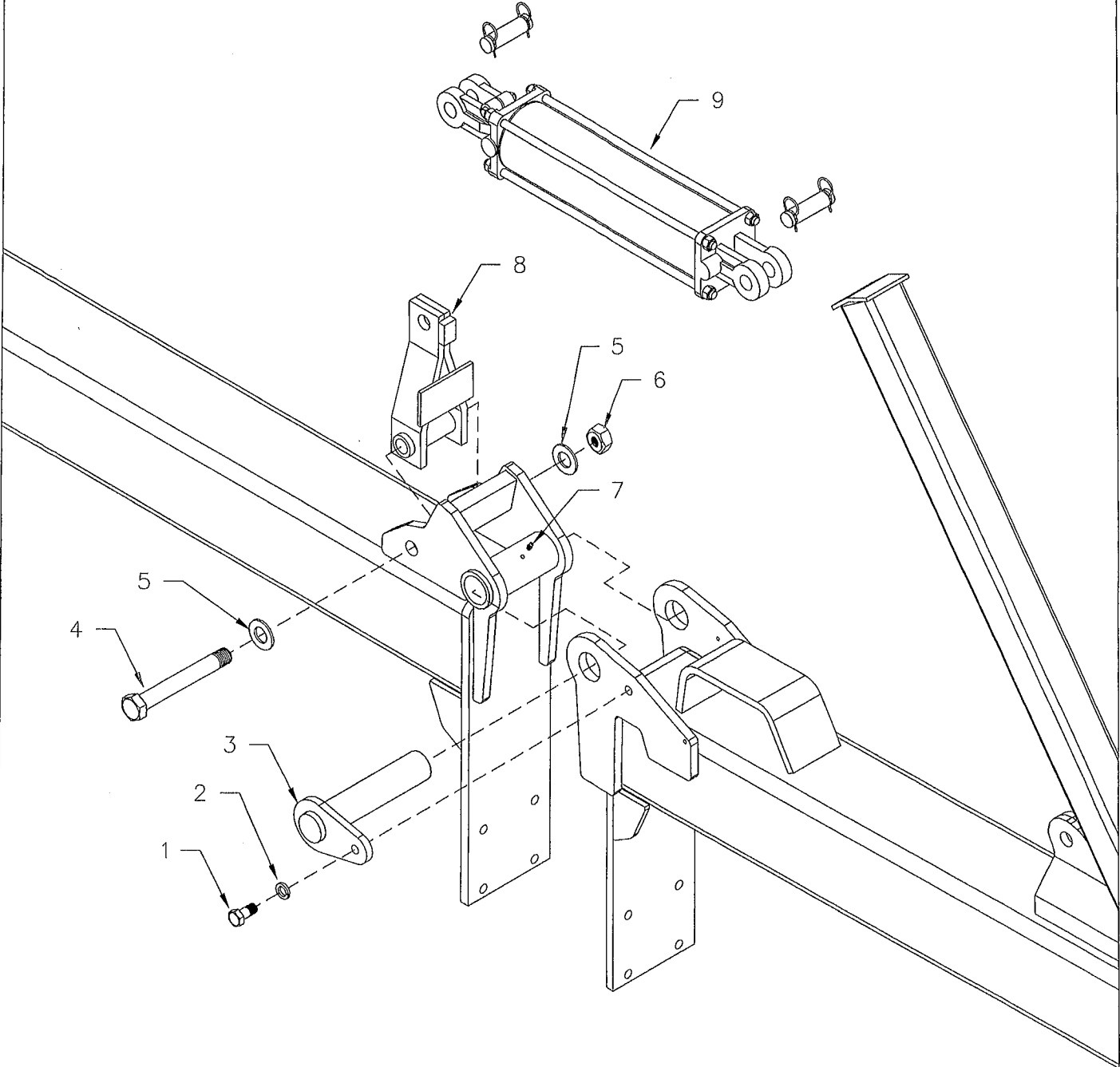
WING HYDRAULIC PLUMBING  
ALL MODELS



Dwg. No. 00056

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10612	HYD. CYLINDER 80830/80836 3-1/2" x 16"	2	4	10750	HOSE ASSEMBLY 6mit-6mp-6mp	2
	10627	81030/81036 4" x 16"	2		10752	80830	2
	10627	81230/81236 4" x 16"	2		10754	80836	2
	10615	81630/81636 5" x 16"	2		10756	81030/81230	2
2	90198	ELBOW MP x NPSM 1501-08-06	4		10758	81036/81236	2
3		HOSE ASSEMBLY 6mit-6mp-6mp			10760	81630	2
	10749	80830	2	5	90239	81636	2
	10751	80836	2	6	10748	FEMALE PIPE TEE 5605-06-06-06	2
	10753	81030/81230	2	7	90245	HOSE ASSEMBLY 6mit-6mp-8mp X 60"	2
	10754	81036/81236	2			PIONEER COUPLING	2
	10757	81630	2				
	10759	81636	2				

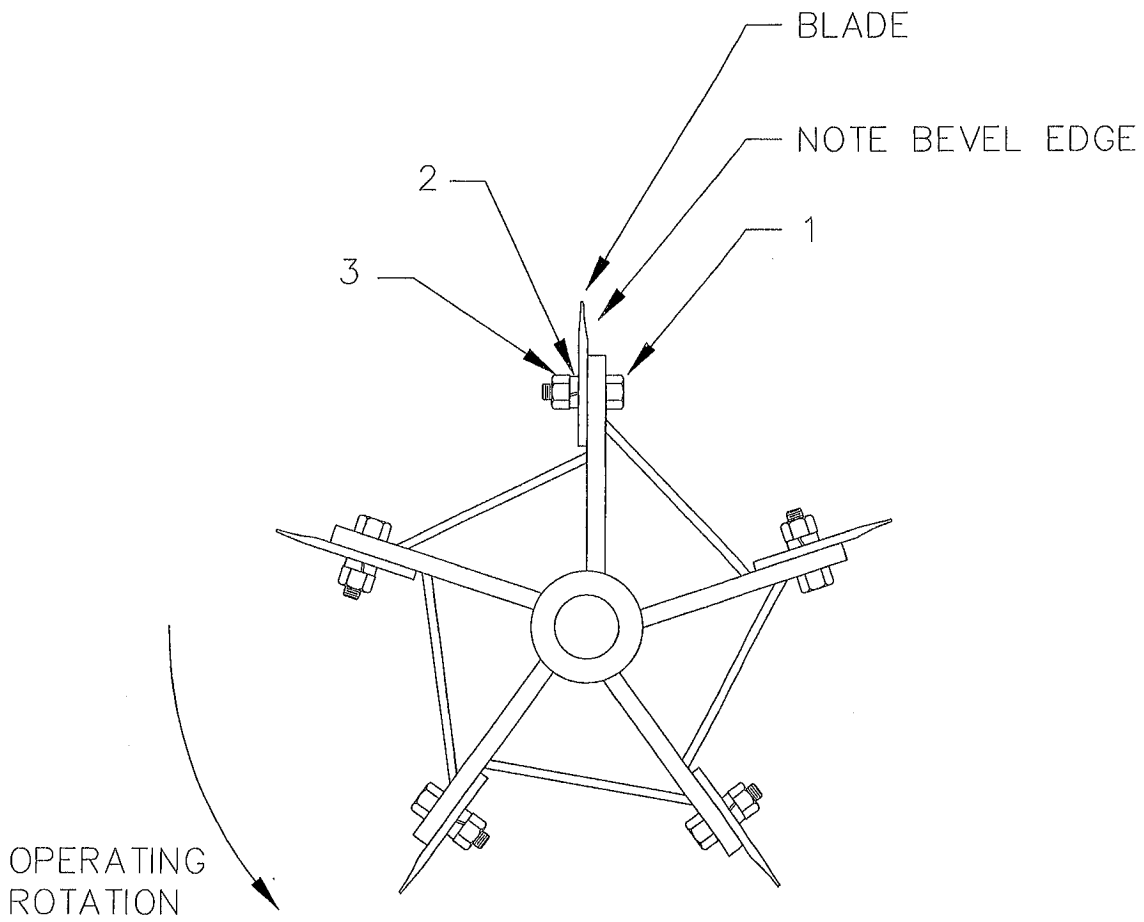
WING HINGE ASSEMBLY  
ALL MODELS



Dwg. No. 00055

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90153	BOLT 5/8"NC x 1-1/2"	1	6	90111	NUT 1"NC DEFORMED	1
2	90123	WASHER 5/8" LOCK	1	7	90101	ZERK 1/4" THREADED	1
3	10108	PIVOT PIN	1	8	10111	WING LEVER	1
4	10810	BOLT 1" NC x 7-3/4" ALT. FROM 1" X 9	1	9	10612	HYD. CYLINDER 3-1/2 x 16"	1
5	90112	WASHER 1" FLAT	2				

REVISION 03/18/99

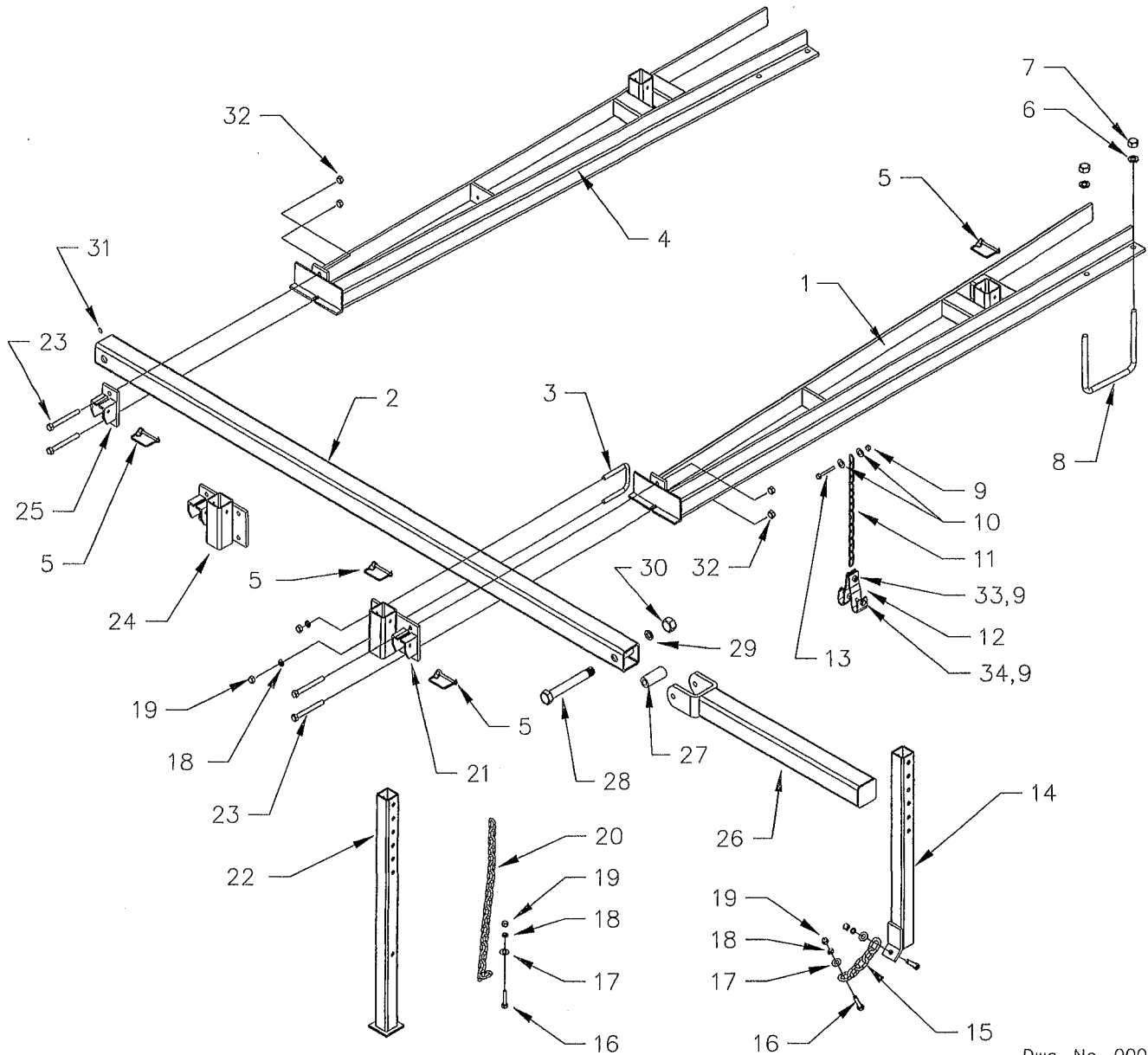


5 BLADE SPIDER/BLADE ASS'Y

Dwg. No. 00042

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	90136	BOLT 1/2"NC x 1-1/2"	
2	90134	WASHER 1/2" LOCK	
3	90138	NUT 1/2"NC	

## 5 BAR SPIKE TOOTH HARROW



Dwg. No. 00072

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
1	10161	72" ARM (LEFT)	**	18	90134	WASHER 1/2" LOCK	**
2	**	CENTER CARRIER BAR	1	19	90138	NUT 1/2"NC	**
3	90141	U-BOLT 1/2"NC x 3-1/8" x 4"	**	20	90202	CHAIN 5/16 19 LINKS	**
4	10162	72" ARM (RIGHT)	**	21	10154	REAR LOCK/STAND (LH)	1
5	90184	LYNCH PIN - WIRE LOCK 3/8" DIA.	**	22	10150	HARROW STAND	2
6	90123	WASHER 5/8" LOCK	**	23	90191	BOLT 1/2"NC x 4-1/2"	**
7	90137	NUT 5/8"NC	**	24	10153	REAR LOCK/STAND (RH)	1
8	90143	U-BOLT 5/8"NC x 7-1/8" x 8-1/4"	**	25	10152	REAR CHAIN LOCK	**
9	90199	NUT 3/8"NC DEFORMED LOCK	**	26	**	WING CARRIER BAR	2
10	90224	WASHER 3/8" FLAT	**	27	10269	SLEEVE	2
11	90221	CHAIN 3/16 25 LINKS	**	28	10811	BOLT 3/4"NC x 5" ALT FROM 3/4 X 6	2
12	10255	LIFT CLIP	**	29	90158	WASHER 3/4" LOCK	2
13	90120	BOLT 3/8"NC x 1"	**	30	90160	NUT 3/4"NC	2
14	10151	FRONT HEIGHT BAR	**	31	90101	ZERK - 1/4" THREADED	2
15	90222	CHAIN 3/8 5 LINKS	**	32	90192	NUT 1/2"NC DEFORMED LOCK	**
16	90136	BOLT 1/2"NC x 1-1/2"	**	33	90173	BOLT 3/8"NC X 1-1/4"	**
17	90131	WASHER 1/2" FLAT	**	34	-----	BOLT 3/8"NC X 1-1/2"	**

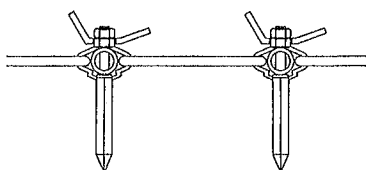
REVISION 03/18/99

\*\* VARIES WITH MACHINE MODEL.

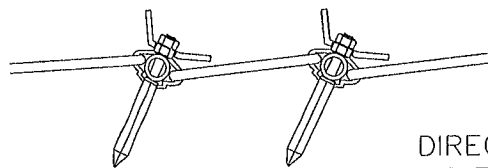
## 5 BAR SPIKE TOOTH HARROW

- \*\*\* CAUTION: MAKE SURE ALL PARTS ARE HELD SECURELY BEFORE USING.
- \*\*\* CAUTION: DUE TO THE EXTRA WEIGHT OF THE HARROW ON THIS MACHINE IT WILL TIP BACK WHEN DETACHED FROM THE TRACTOR IF THE STANDS ARE NOT IN PROPER POSITION.
- \*\*\* CAUTION: A SLOW MOVING VEHICLE (SMV) SIGN MUST BE ATTACHED TO THE REAR OF THIS MACHINE WHENEVER IT IS BEING TRANSPORTED ON PUBLIC STREETS OR HIGHWAYS.

STEEP  
ANGLE  
OF  
ATTACK



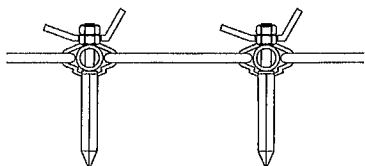
AT REST



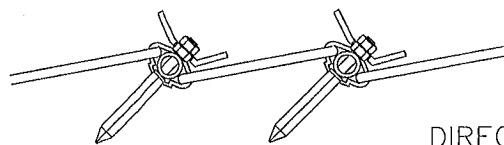
UNDER TOW

DIRECTION  
OF TRAVEL

SHALLOW  
ANGLE  
OF  
ATTACK



AT REST



UNDER TOW

DIRECTION  
OF TRAVEL

PULL THE HARROW AHEAD A FEW FEET TO CHECK THAT EVERYTHING IS PROPERLY ASSEMBLED AND THAT NOTHING IS BINDING OR OUT OF ALIGNMENT.

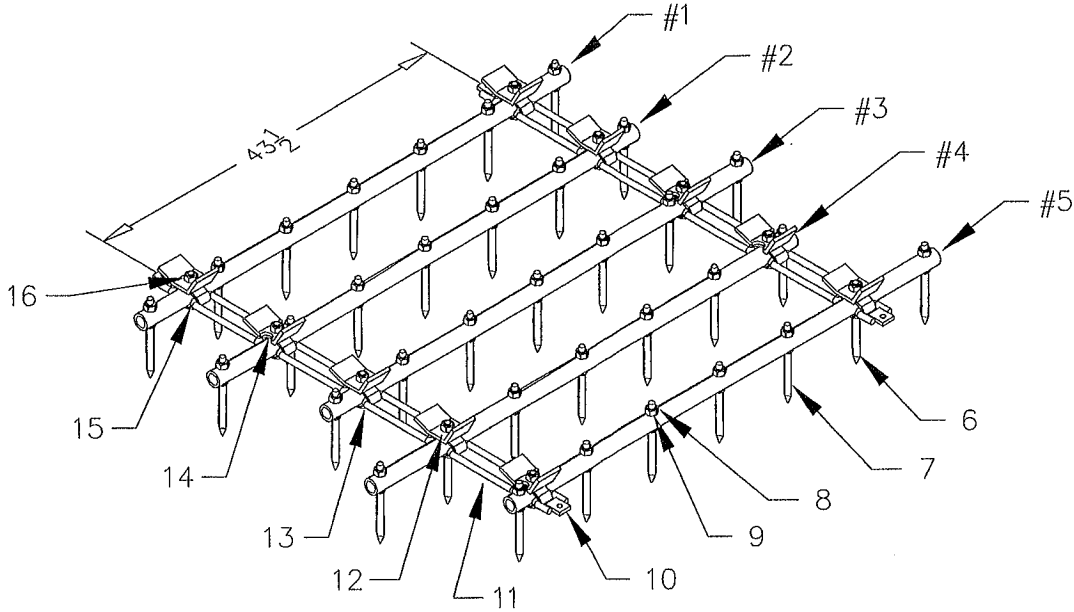
CHECK THAT ALL BOLTS AND NUTS ARE TIGHT.

ADJUST THE FRONT HEIGHT BAR SO THAT WHEN THE HARROWS ARE BEING PULLED IN THE FIELD POSITION THE PULL CHAINS PULL THE HARROW SECTIONS STRAIGHT ON AND AT A SLIGHT UPWARD ANGLE.

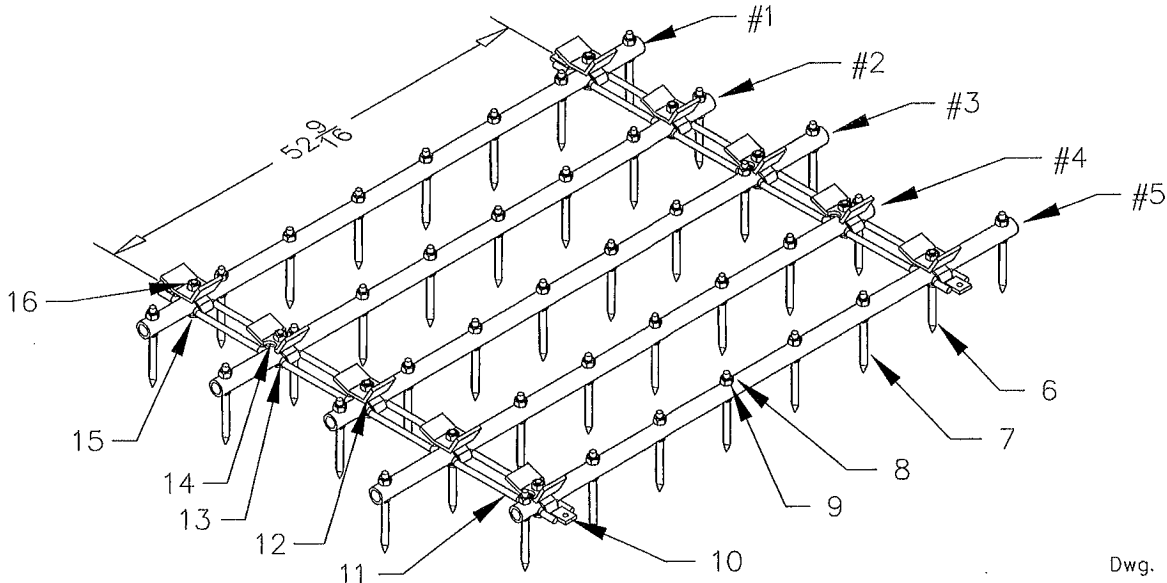
ADJUST THE LIFT CHAINS SO THE HARROW SECTIONS DO NOT DRAG ON THE GROUND WHEN IN THE TRANSPORT POSITION.



5 BAR SPIKE TOOTH HARROW



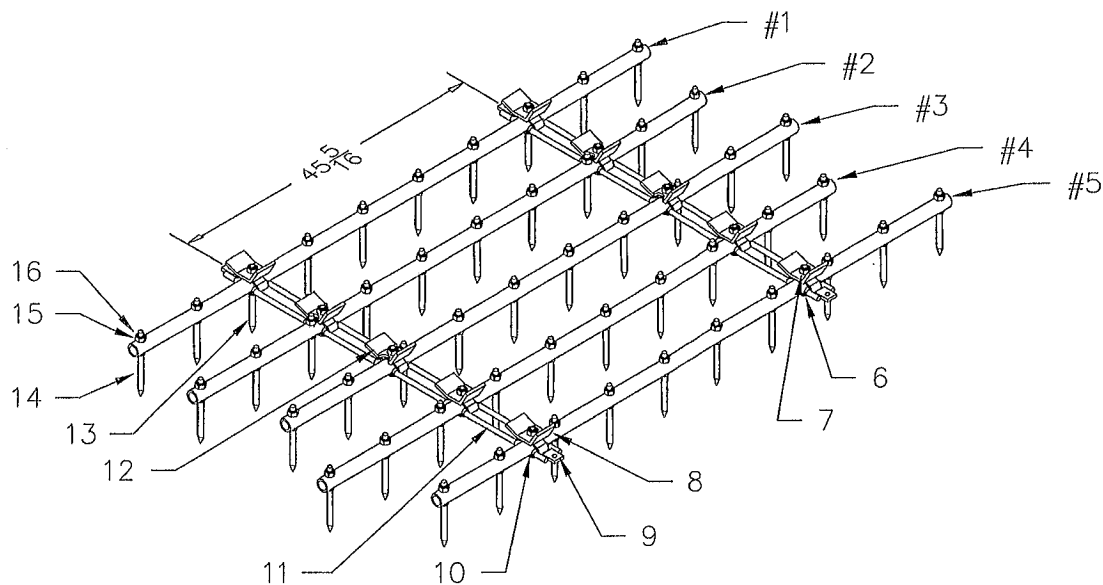
REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
#1	10261	HARROW SECTION COMPLETE 5'		9	90134	WASHER 1/2" LOCK	33
***		HARROW BAR 7 TOOTH	1	10	10251	PULL	4
#2	***	HARROW BAR 7 TOOTH	1	11	10252	CONNECTOR LINK	8
#3	***	HARROW BAR 7 TOOTH	1	12	10253	LINK CAP - PLAIN	6
#4	***	HARROW BAR 7 TOOTH	1	13	10218	LINK CAP CLIP	10
#5	***	HARROW BAR 7 TOOTH	1	14	10254	LINK CAP - NOTCHED	4
6	10262	1/2"NC x 3" SPIKE TOOTH SHANK	2	15	90193	BOLT 1/2"NC x 3"	8
7	10250	1/2"NC x 2-1/2" SPIKE TOOTH SHANK	33	16	90192	NUT 1/2"NC DEFORMED	10
8	90138	NUT 1/2"NC	33				



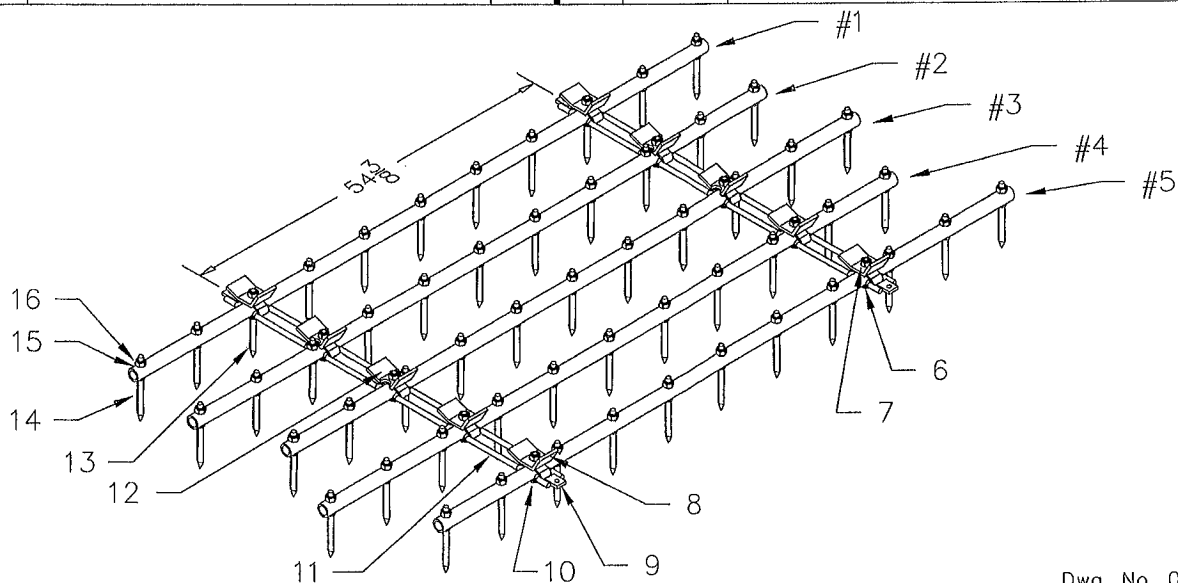
Dwg. No. 00044

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
#1	10256	HARROW SECTION COMPLETE 6'		9	90134	WASHER 1/2" LOCK	38
***		HARROW BAR 8 TOOTH	1	10	10251	PULL	4
#2	***	HARROW BAR 8 TOOTH	1	11	10252	CONNECTOR LINK	8
#3	***	HARROW BAR 8 TOOTH	1	12	10253	LINK CAP - PLAIN	6
#4	***	HARROW BAR 8 TOOTH	1	13	10218	LINK CAP CLIP	10
#5	***	HARROW BAR 8 TOOTH	1	14	10254	LINK CAP - NOTCHED	4
6	10262	1/2"NC x 3" SPIKE TOOTH SHANK	2	15	90193	BOLT 1/2"NC x 3"	8
7	10250	1/2"NC x 2-1/2" SPIKE TOOTH SHANK	38	16	90192	NUT 1/2"NC DEFORMED	10
8	90138	NUT 1/2"NC	38				

### 5 BAR SPIKE TOOTH HARROW



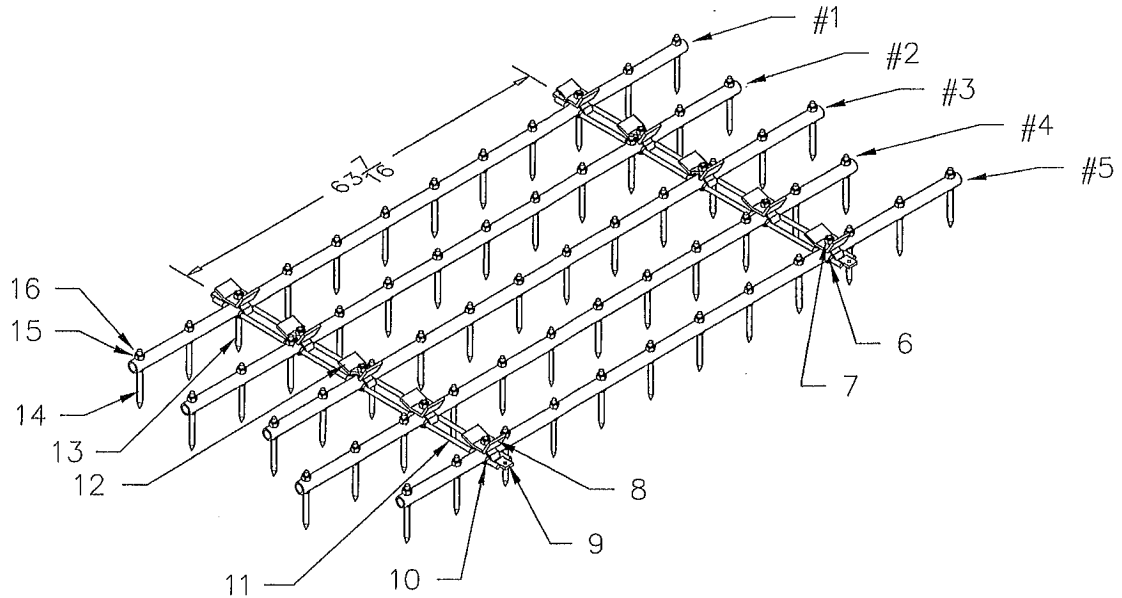
REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
#1	10257	HARROW SECTION COMPLETE 7-1/2'	1	9	10251	PULL	4
#2	***	HARROW BAR 10 TOOTH	1	10	10218	LINK CAP CLIP	10
#3	***	HARROW BAR 10 TOOTH	1	11	10252	CONNECTOR LINK	8
#4	***	HARROW BAR 10 TOOTH	1	12	10254	LINK CAP - NOTCHED	4
#5	***	HARROW BAR 10 TOOTH	1	13	10262	1/2"NC x 3" SPIKE TOOTH SHANK	2
6	90193	BOLT 1/2"NC x 3"	8	14	10250	1/2"NC x 2-1/2" SPIKE TOOTH SHANK	48
7	90192	NUT 1/2"NC DEFORMED	10	15	90134	WASHER 1/2" LOCK	48
8	10253	LINK CAP - PLAIN	6	16	90138	NUT 1/2"NC	48



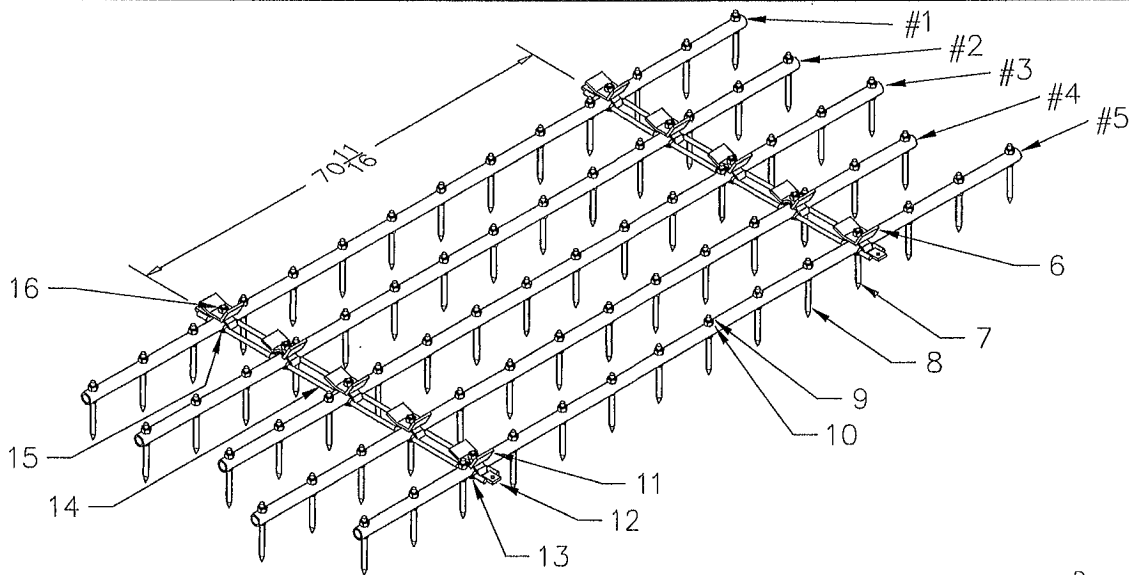
Dwg. No. 00045

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
#1	10258	HARROW SECTION COMPLETE 8'	1	9	10251	PULL	4
#2	***	HARROW BAR 11 TOOTH	1	10	10218	LINK CAP CLIP	10
#3	***	HARROW BAR 11 TOOTH	1	11	10252	CONNECTOR LINK	8
#4	***	HARROW BAR 11 TOOTH	1	12	10254	LINK CAP - NOTCHED	4
#5	***	HARROW BAR 11 TOOTH	1	13	10262	1/2"NC x 3" SPIKE TOOTH SHANK	2
6	90193	BOLT 1/2"NC x 3"	8	14	10250	1/2"NC x 2-1/2" SPIKE TOOTH SHANK	53
7	90192	NUT 1/2"NC DEFORMED	10	15	90134	WASHER 1/2" LOCK	53
8	10253	LINK CAP - PLAIN	6	16	90138	NUT 1/2"NC	53

5 BAR SPIKE TOOTH HARROW



REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
#1	10259	HARROW SECTION COMPLETE 9'	1	9	10251	PULL	4
#2	***	HARROW BAR 12 TOOTH	1	10	10218	LINK CAP CLIP	10
#3	***	HARROW BAR 12 TOOTH	1	11	10252	CONNECTOR LINK	8
#4	***	HARROW BAR 12 TOOTH	1	12	10254	LINK CAP - NOTCHED	4
#5	***	HARROW BAR 12 TOOTH	1	13	10262	1/2"NC x 3" SPIKE TOOTH SHANK	2
6	90193	BOLT 1/2"NC x 3"	8	14	10250	1/2"NC x 2-1/2" SPIKE TOOTH SHANK	58
7	90192	NUT 1/2"NC DEFORMED	10	15	90134	WASHER 1/2" LOCK	58
8	10253	LINK CAP - PLAIN	6	16	90138	NUT 1/2"NC	58



Dwg. No. 00046

REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D	REF. NO.	PART NUMBER	DESCRIPTION	No. REQ'D
#1	10260	HARROW SECTION COMPLETE 10'	1	9	90138	NUT 1/2"NC	68
#2	***	HARROW BAR 14 TOOTH	1	10	90134	WASHER 1/2" LOCK	68
#3	***	HARROW BAR 14 TOOTH	1	11	10254	LINK CAP - NOTCHED	4
#4	***	HARROW BAR 14 TOOTH	1	12	10251	PULL	4
#5	***	HARROW BAR 14 TOOTH	1	13	10218	LINK CAP CLIP	10
6	10253	LINK CAP - PLAIN	6	14	10252	CONNECTOR LINK	8
7	10262	1/2"NC x 3" SPIKE TOOTH SHANK	2	15	90193	BOLT 1/2"NC x 3"	8
8	10250	1/2"NC x 2-1/2" SPIKE TOOTH SHANK	68	16	90192	NUT 1/2"NC DEFORMED	10