

Assembly Instructions for the Rolling Harrow and Reel

Turbo-Till

6/26/03

Your initial action is to locate the correct drag frame [(61) 589-107H through 589-116H]. Bolt the drag frame to the rear drag plates located on the rear of your Great Plains Turbo Till, using 5/8x1 1/2 hex bolts [(43) 802-051C] with 5/8" hex nuts [(25) 803-021C] and 5/8" lock washers [(26) 804-022C]. The rolling harrow gangs shown in figure 4 will come to you partially assembled. To finish assembly, refer to the table in figure 4 and assemble accordingly. Start by locating the correct rolling harrow tube, center it over your partial assembly on the bearing hangers [(52) 589-142H], and mount the tube using 5/8x3x4 1/2 U-bolts [(44) 806-183C] with a lock washer and nut. Your next step is to locate the ball joint assemblies [(59) 589-064H]. Figure 4 shows you the dimensions to mount the ball joint assemblies on the rolling harrow tube. Count the number of each assembly in figures 1-3 and assemble accordingly.

Mount the rolling harrow brackets [(60) 589-057H] to the under side of the drag frames according to the dimensions in figures 1-3, using a 5/8x3x4 1/2 U-bolt [(44) 806-183C] with a lock washer and nut. You may tighten the U-bolts on all the brackets that are closest to the rear of the machine. Leave the front brackets loose to slide until the rolling harrow assemblies are hung under the frame. Use the 1x4 hex bolt and 1" nylock nut through the harrow brackets (589-057H) and ball joint assemblies [(59) 589-064H] to hang the rolling harrow assemblies under the frame. Be careful to put the proper gang in the proper location and be sure that the assemblies are oriented correctly as shown in figure 4. When all gangs are hung under the frame, tighten the remaining U-bolts

Mount the rear stand bracket [(71) 580-049H], if applicable, to the drag frame with 5/8x4x4 1/4 U-bolts, a lock washer and a nut as shown on figure 1. The rear stand leg [(70) 560-196H] should be pinned in the rear stand bracket with a 3/4x4 1/2 pin and retainer (805-081C).

Mount the reel arm assemblies (589-069L) to the drag frames, using the dimensions in figures 6-10, using a 5/8x3x4 1/2 U-bolt [(44) 806-183C] with a lock washer and nut. These bolts may be tightened at this time. Assemble the reel sub-assemblies to the reel tube by U-bolting the reel brackets to the correct tube with a 5/8x2 1/2x3 3/4 U-bolt [(16) UB0037], lock washer, and nut. See bottom of page for correct reel assemblies. If you are assembling a 10' or 12' reel, do not install the two center U-bolts as you will use 5/8x4 hex bolts (802-060C) with lock washers and nuts in this location as shown in figure 5. Once the reels are attached to the reel bar, bolt the reel bar to the reel arm assemblies using the dimensions in figures 1, 2, and 3. If you are bolting on a 10' or 12' section; by using the 5/8x4 bolts as shown in figure 5 the reel will be in the proper location. If the reels between the center section and the wing sections are closer than 4", recheck the reel arm dimensions.

Reel Assemblies

3 1/2' reel sub-assembly bolts onto 575-273D - 46" tube

5' reel sub-assembly bolts onto 575-092D - 60" tube

6' reel sub-assembly bolts onto 575-093D - 74" tube

2 - 5' reel sub-assemblies bolt onto 575-097D - 120" tube

2 - 6' reel sub-assemblies bolt onto 575-099D - 150" tube

1200TT – ROLLING HARROW PLACEMENT @ 22°

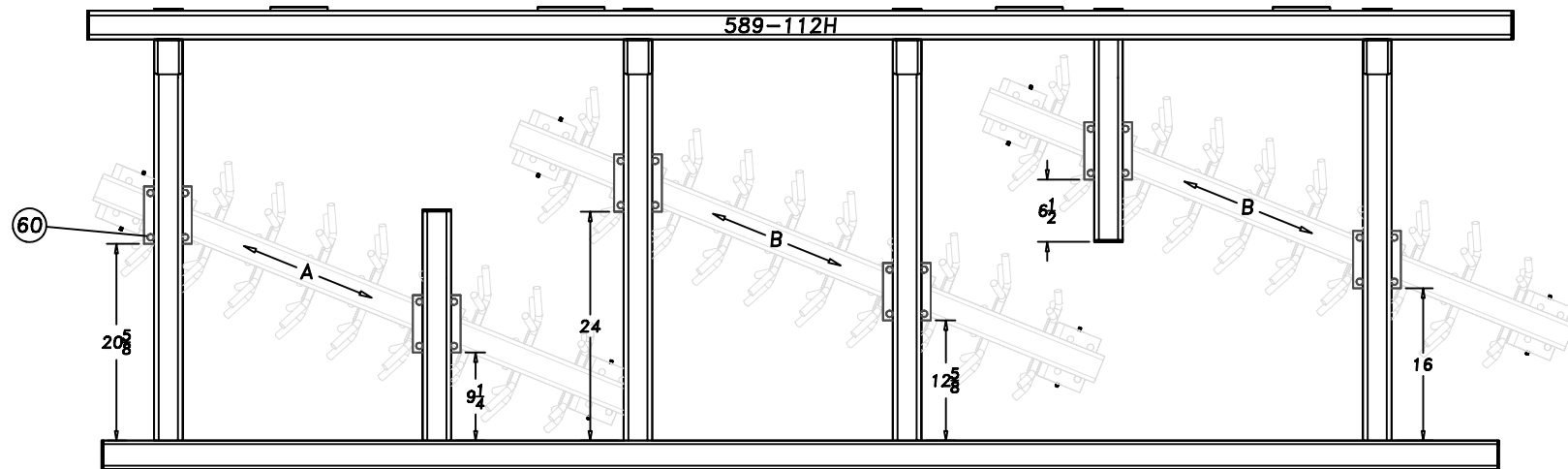
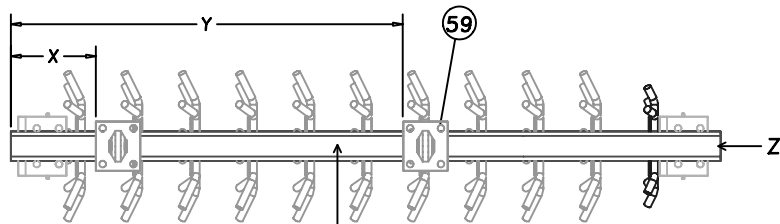


FIG. 1

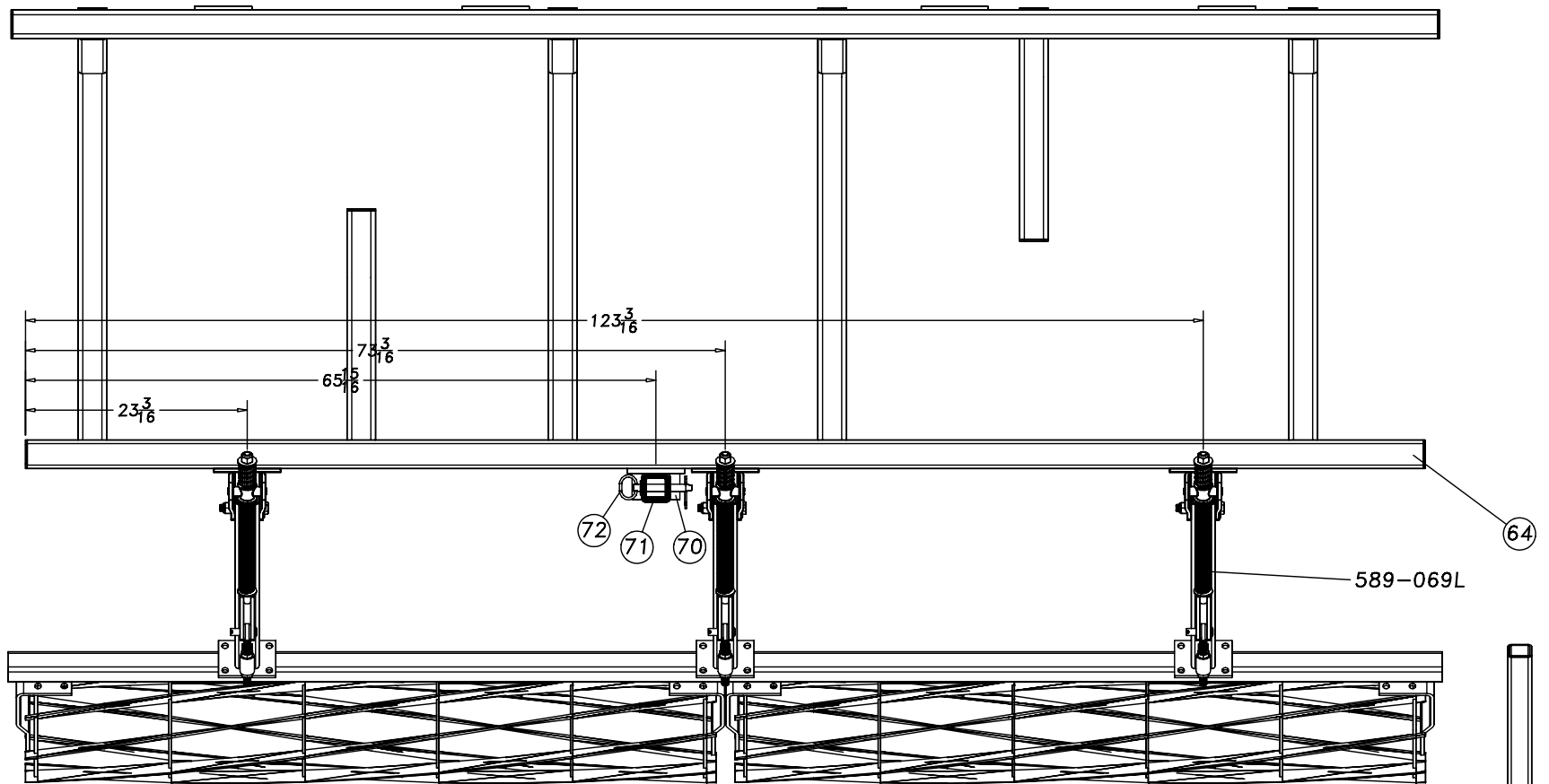


ROLLING HARROW GANG—
CENTER TUBE ON BRACKETS

FIG. 4

BALL JOINT LOCATION				
		X DIM	Y DIM	Z TUBE
A	9 WHEEL	5 5/8"	36"	60"
B	10 WHEEL	11 5/8"	42"	66"

1200TT - REEL PLACEMENT



12' REEL ASSEMBLY
575-646S

FIG. 6

USE 5/8X4 HEX BOLTS
(802-060C) IN CENTER

CENTER OF REEL-
BOLTS DIRECTLY ON
CENTER REEL ARM

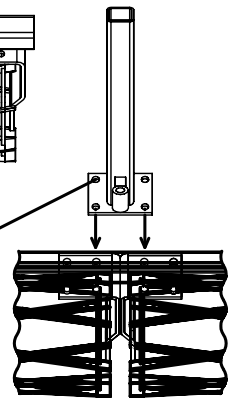
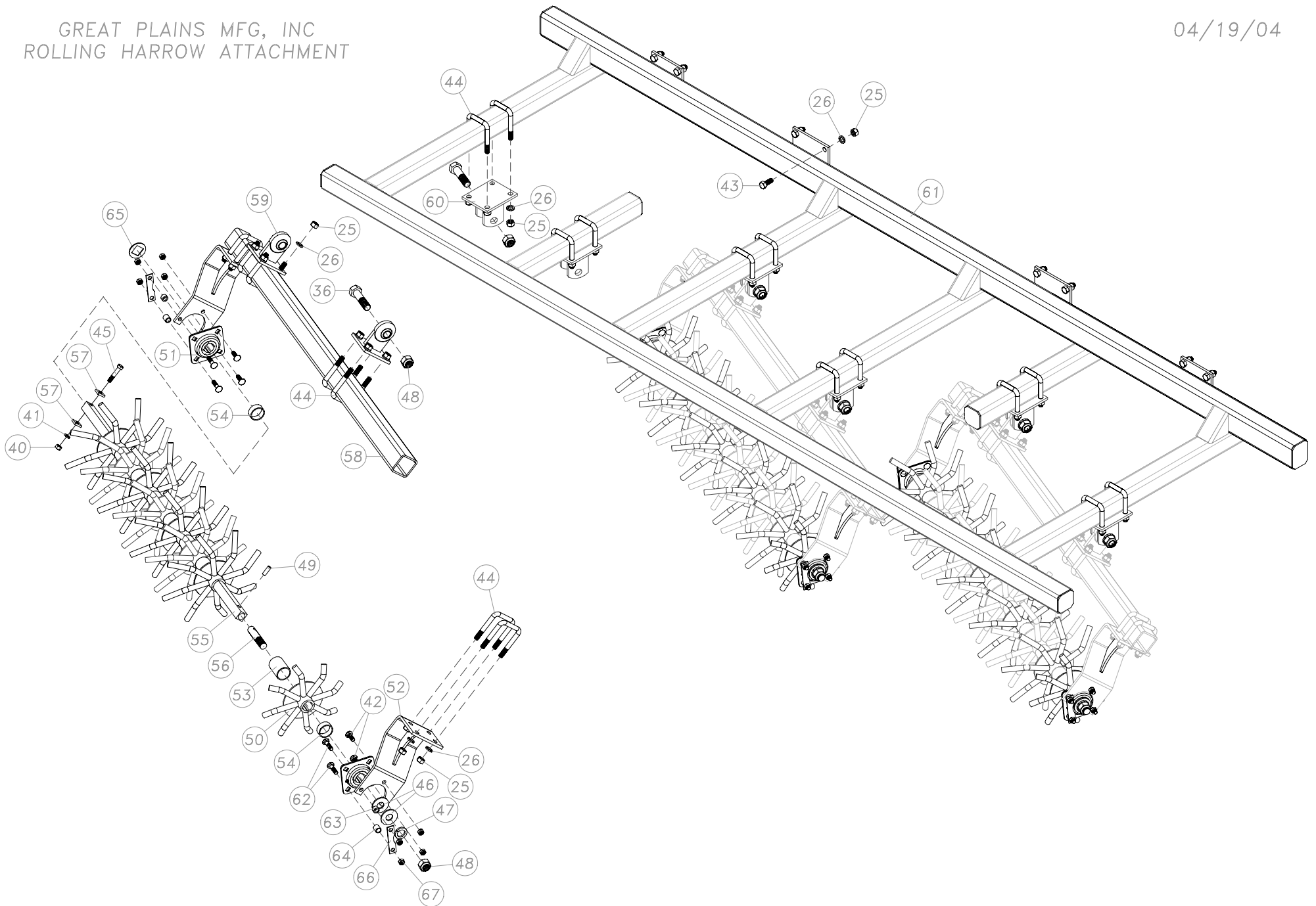


FIG. 5

GREAT PLAINS MFG, INC
ROLLING HARROW ATTACHMENT

04/19/04





**TURBOTILL FINISHING ATTACHMENTS
ROLLING HARROW**

REF NO.	DESCRIPTION	PART NO. (KENT MFG)	PART NO. (GP)	1200TT	2200TT	3000TT	4000TT
ROLLING HARROW GANG ASSEMBLIES							
	7 WHEEL ROLLING HARROW GANG		589-065K				
	8 WHEEL ROLLING HARROW GANG		589-066K				
	9 WHEEL ROLLING HARROW GANG		589-067K	1			
	10 WHEEL ROLLING HARROW GANG		589-068K	2			5
	11 WHEEL ROLLING HARROW GANG		589-071K			4	4
	12 WHEEL ROLLING HARROW GANG		589-095K		2		
	13 WHEEL ROLLING HARROW GANG		589-117K		2	2	
<i>(INDIVIDUAL PARTS INCLUDED IN GANG ASSEMBLIES)</i>							
64	3/4 LONG X 1/2 TINE STOP/SPACER	n/a	550-134D	6	8	12	18
63	1/2 LONG X 1/2 BOLT SPACER	n/a	585-013D	6	8	12	18
50	SPIDER WHEEL LARGE	n/a	589-055H	12	22	32	40
	SPIDER WHEEL OFFSET @ 22.5	n/a	589-056H	14	24	32	45
	SPIDER WHEEL SMALL	n/a	589-094H	3	4	6	9
51	BEARING, 1 1/4" SQUARE	PW0115	822-209C	6	10	14	18
52	BEARING HANGER	n/a	589-142H	6	10	14	18
53	SPACER - LONG	n/a	589-026D	26	46	64	85
54	SPACER - SHORT	n/a	589-027D	6	12	16	18
55	43 7/8 ROLLING HARROW SHAFT	n/a	589-014D	0	0	0	0
	49 5/8 ROLLING HARROW SHAFT	n/a	589-015D	0	0	0	0
	55 1/2 ROLLING HARROW SHAFT	n/a	589-016D	1	0	0	0
	61 3/8 ROLLING HARROW SHAFT	n/a	589-017D	2	0	0	5
	67 1/8 ROLLING HARROW SHAFT	n/a	589-029D	0	0	4	4
	73 ROLLING HARROW SHAFT	n/a	589-050D	0	2	0	0
	79 3/8 ROLLING HARROW SHAFT	n/a	589-056D	0	2	2	0
66	ZERK GUARD ROLLING HARROW	n/a	589-085D	6	8	12	18
56	1" THREADED STUB SHAFT	PW0126	800-364C	3	4	6	9
57	WASHER, RECT 1/4X1" FLAT	PW0116	585-057D	6	8	12	18
49	PIN, 1/2" HR RND 1 3/8" LONG	PW0140	585-056D	3	4	6	9
65	TREADER SHAFT 1/8" SPACER	PW0427	585-066D	3	4	6	9
58	48" ROLLING HARROW TUBE	n/a	589-018D	0	0	0	0
	54" ROLLING HARROW TUBE	n/a	589-019D	0	0	0	0
	60" ROLLING HARROW TUBE	n/a	589-020D	1	0	0	0
	66" ROLLING HARROW TUBE	n/a	589-021D	2	0	0	5
	72" ROLLING HARROW TUBE	n/a	589-031D	0	0	4	4
	78" ROLLING HARROW TUBE	n/a	589-049D	0	2	0	0
	84" ROLLING HARROW TUBE	n/a	589-055D	0	2	2	0
67	NUT HEX TOP LOCK 1/2-13 PLT	n/a	803-342C	24	32	48	72
40	1/2" HEX NUT	3008	803-020C	3	4	6	9
41	1/2" LOCK WASHER	4108	804-015C	3	4	6	9
42	1/2 x 1 1/2" CARRIAGE BOLT	240824	802-106C	12	16	24	36
62	RHSNB 1/2-13X2 GR5	n/a	802-129C	12	16	24	36
45	1/2 x 2 1/2" HEX BOLT	110540	802-130C	3	4	6	9
25	5/8" HEX NUT	3010	803-021C	24	40	56	72
26	5/8" LOCK WASHER	4110	804-022C	24	40	56	72
44	5/8 x 3 x 4 1/2" U-BOLT	UB0029	806-183C	12	20	28	36
46	1" FLAT WASHER	4016	804-028C	6	8	12	18
47	1" LOCK WASHER	4116	804-027C	3	4	6	9
48	1" NYLOCK HEX NUT	3616	803-038C	3	4	6	9
ROLLING HARROW GANG MOUNTING HARDWARE							
59	BALL JOINT BRACKET	n/a	589-064H	6	8	12	18
60	BRACKET - ROLLING HARROW	n/a	589-057H	6	8	12	18
61	DRAG FRAME 43 3/4 RH	n/a	589-107H				1
	DRAG FRAME 56 RH	n/a	589-108H		1		
	DRAG FRAME 106 RH	n/a	589-109H			1	
	DRAG FRAME 109 1/2 RH	n/a	589-110H				1
	DRAG FRAME 129	n/a	589-111H		1	1	
	DRAG FRAME 149	n/a	589-112H	1			1
	DRAG FRAME 43 3/4 LH	n/a	589-113H				1
	DRAG FRAME 56 LH	n/a	589-114H		1		
	DRAG FRAME 106 LH	n/a	589-115H			1	
	DRAG FRAME 109 1/2 LH	n/a	589-116H				1
36	1 x 4 HEX BOLT	111664	802-073C	6	8	12	18
48	1" NYLOCK NUT	3616	803-038C	6	8	12	18
43	5/8 x 1 1/2" HEX BOLT	111024	802-051C	16	32	40	56
25	5/8" HEX NUT	3010	803-021C	64	96	136	200
26	5/8" LOCK WASHER	4110	804-022C	64	96	136	200
44	5/8 x 3 x 4 1/2" U-BOLT	UB0029	806-183C	24	32	48	72

Harrow Width (Feet)

11.7

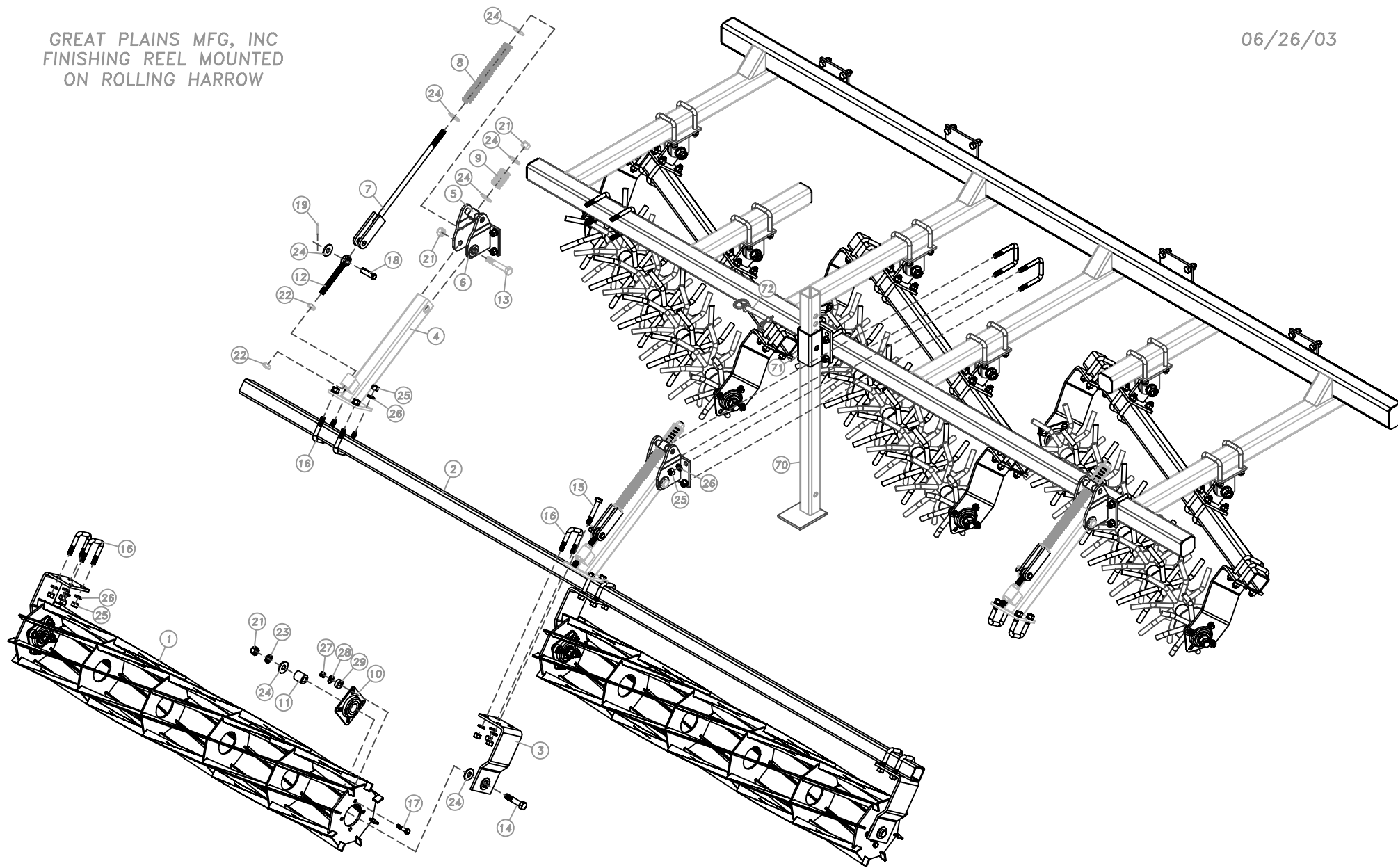
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38.1

GREAT PLAINS MFG, INC
FINISHING REEL MOUNTED
ON ROLLING HARROW

06/26/03





**TURBOTILL FINISHING ATTACHMENTS
FINISHING REELS FOR ROLLING HARROW**

REF NO.	DESCRIPTION	PART NO. (KENT MFG)	PART NO. (GP)	1000TT	1200TT	2200TT	3000TT	4000TT
1	3 1/2' REEL WELDMENT	DA0149	575-525H	1				2
	5' REEL WELDMENT	DA0150	575-526H	1		2	6	4
	6' REEL WELDMENT	DA0151	575-527H		2	2		2
2	REEL MOUNTING TUBE, 46"	TS1444	575-273D					2
	REEL MOUNTING TUBE, 74"	TS1446	575-093D			2		
	REEL MOUNTING TUBE, 106"	TS1449	575-096D	1				
	REEL MOUNTING TUBE, 120"	TS1450	575-097D			1	3	2
	REEL MOUNTING TUBE, 150"	TS1452	575-099D		1			1
3	REEL BRACKET	DA0153	575-521H	4	4	8	12	16
4	REEL ARM	n/a	589-060H	3	3	7	9	13
5	3/4" DIA CAST SWIVEL	n/a	812-314C	3	3	7	9	13
6	ARM MOUNT BRKT	n/a	589-059H	3	3	7	9	13
7	CLEVIS BOLT, 3/4" x 22 1/4"	MC0078	575-516H	3	3	7	9	13
8	LONG SPRING	DA0056	807-224C	3	3	7	9	13
9	SHORT SPRING	PW0134	807-226C	3	3	7	9	13
10	BEARING	FC0481	822-208C	4	4	8	12	16
11	SPACER	TR0303	575-141D	4	4	8	12	16
12	EYE BOLT, 3/4 x 5 1/2 LONG	MC0048	802-768C	3	3	7	9	13
70	REAR STAND LEG	FC1606	560-196H	1	1	1	1	1
71	REAR STAND MOUNT BRACKET	PW0282	580-049H	1	1	1	1	1
72	3/4 X 4 1/2 PIN AND RETAINER	131272	805-081C	1	1	1	1	1
13	3/4 x 4 1/2 HEX BOLT	111272	802-192C	3	3	7	9	13
14	3/4 x 3 1/2 HEX BOLT	111256	802-066C	4	4	8	12	16
15	5/8 x 4 HEX BOLT	111064	802-060C	4	4	4	12	12
16	5/8 x 2 1/2 x 3 3/4 U-BOLT	UB0037	806-182C	10	10	26	30	46
44	5/8 x 3 x 4 1/2 U-BOLT	UB0029	806-183C	8	8	16	20	28
17	1/2 x 2 HEX BOLT	110832	802-128C	16	16	32	48	64
18	3/4 x 2 1/2 CLEVIS PIN	211040	805-140C	3	3	7	9	13
19	1/8 x 1 1/2" COTTER KEY	260224	805-225C	3	3	7	9	13
21	3/4" LOCKNUT	3112	803-026C	10	10	22	30	42
22	3/4" JAM NUT	3312	803-048C	6	6	14	18	26
23	3/4" LOCK WASHER	4112	804-024C	4	4	8	12	16
24	3/4" FLAT WASHER	4012	804-024C	23	23	51	69	97
25	5/8" HEX NUT	3010	803-021C	40	40	88	112	160
26	5/8" LOCK WASHER	4110	804-022C	40	40	88	112	160
27	1/2" LOCK NUT	3108	803-019C	16	16	32	48	64
28	1/2" FLAT WASHER	4008	804-017C	16	16	32	48	64
29	LONG RUBBER SPACER	DA0193	816-429C	16	16	32	48	64

Reel Width (Feet) 9.0 12.5 22.7 30.5 40.7