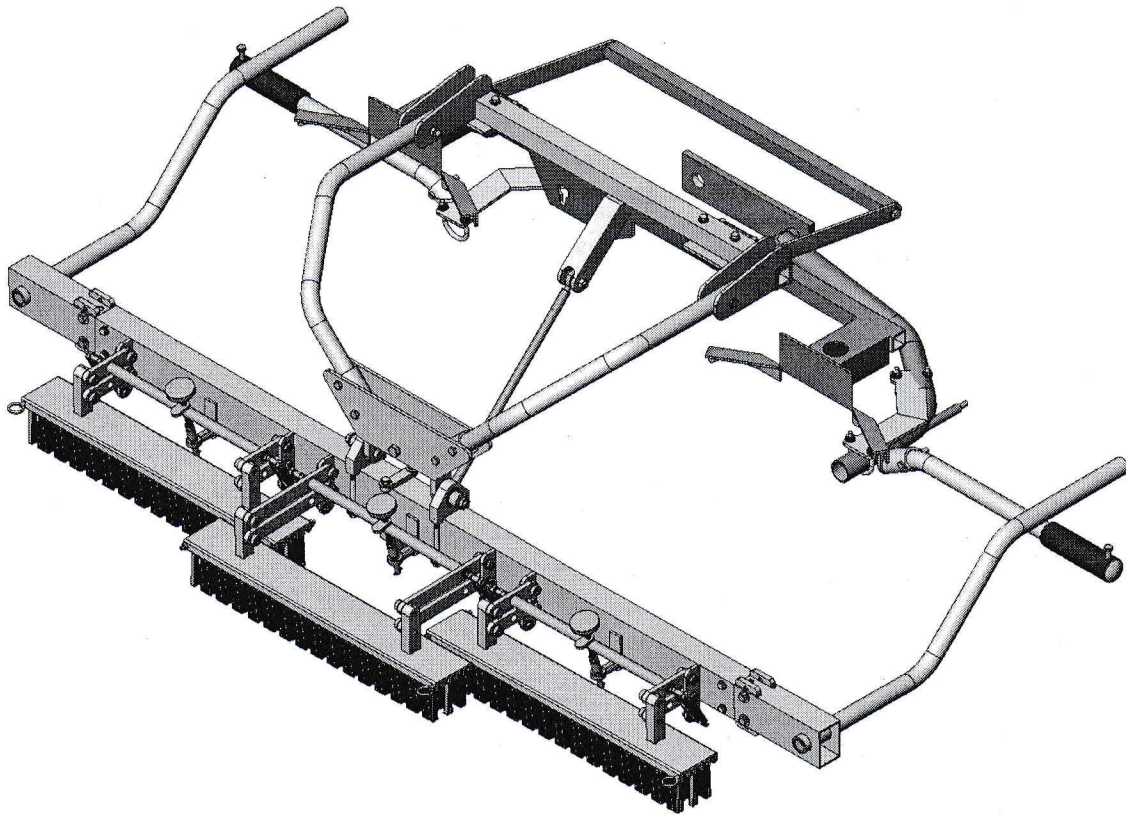


**FLEX-BRUSH  
FOR  
JOHN DEERE 2500 MODELS  
INSTRUCTION AND PARTS  
MANUAL**



APRIL 05, 2017

## FLEX BRUSH SPECIFICATIONS AND SETTINGS

- EFFECTIVE WIDTH : 60 Inches ( 3 Heads 23 Inches Each )
- WEIGHT : 55 Pounds
- CONSTRUCTION : 6061 T6 Aluminum and 303 Stainless Steel
- INDEPENDENT HEADS : 23 Inch Heads, Twin Arm Mounted ( For best Parallel Following of Contours)  
Mounts for One, up to Five Brush Strips in Any Combination of the Following.
- BRUSHES : BLACK - Firm, 0.032" dia. crimped Polypropylene material 3/8" wide x 3" Long.  
BLUE - Soft, 0.020" dia. crimped Polypropylene material 3/8" wide x 3" Long.  
Both Available in Solid or Notched Strips.
- USES : Pre-Mowing / Topdressing / Aerification Fill / Debris Removal

There are several ways to achieve the desired down pressure for you situation. The concept is to limit down travel of the brushes while allowing them to float up when necessary.

Downward force can range from: Minimal auxiliary help, up to being locked in a solid position. At the bottom of the adjuster shaft base there is a small hole that a cotter pin may be installed in that would lock the brushes so they could not float, should that be necessary.

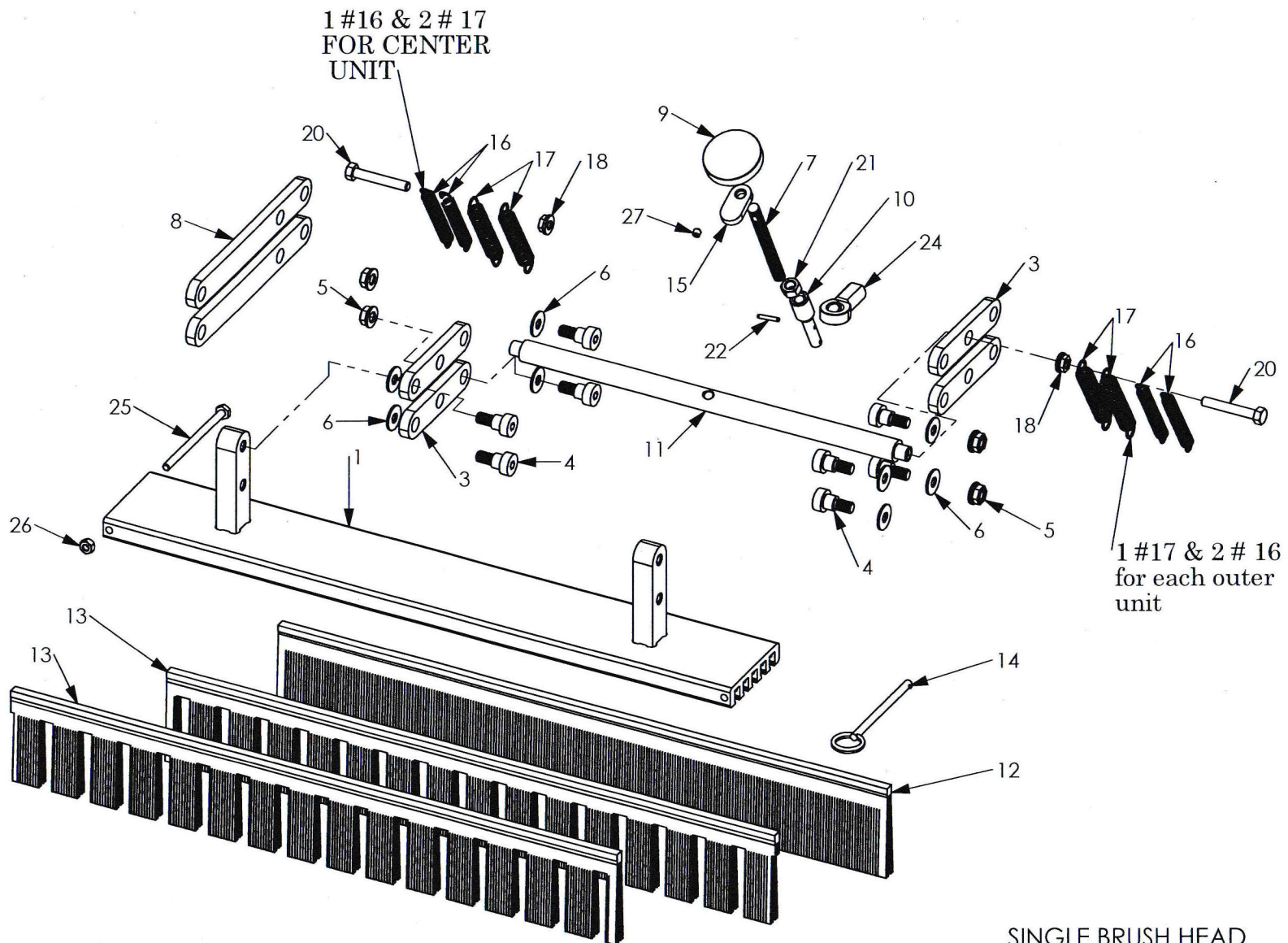
The amount of debris or material to be moved, moisture content, grass type and height of cut will all determine what amount of downward force you will require.

The least amount of downward force is with the auxiliary springs disconnected on the end units, and one each light/soft spring on the center unit. The springs are permanently mounted, and can swing free when not in use. To fix the heads, install cotter pin in adjuster shaft just below spherical rod end to "LOCK" head and stop them from floating.

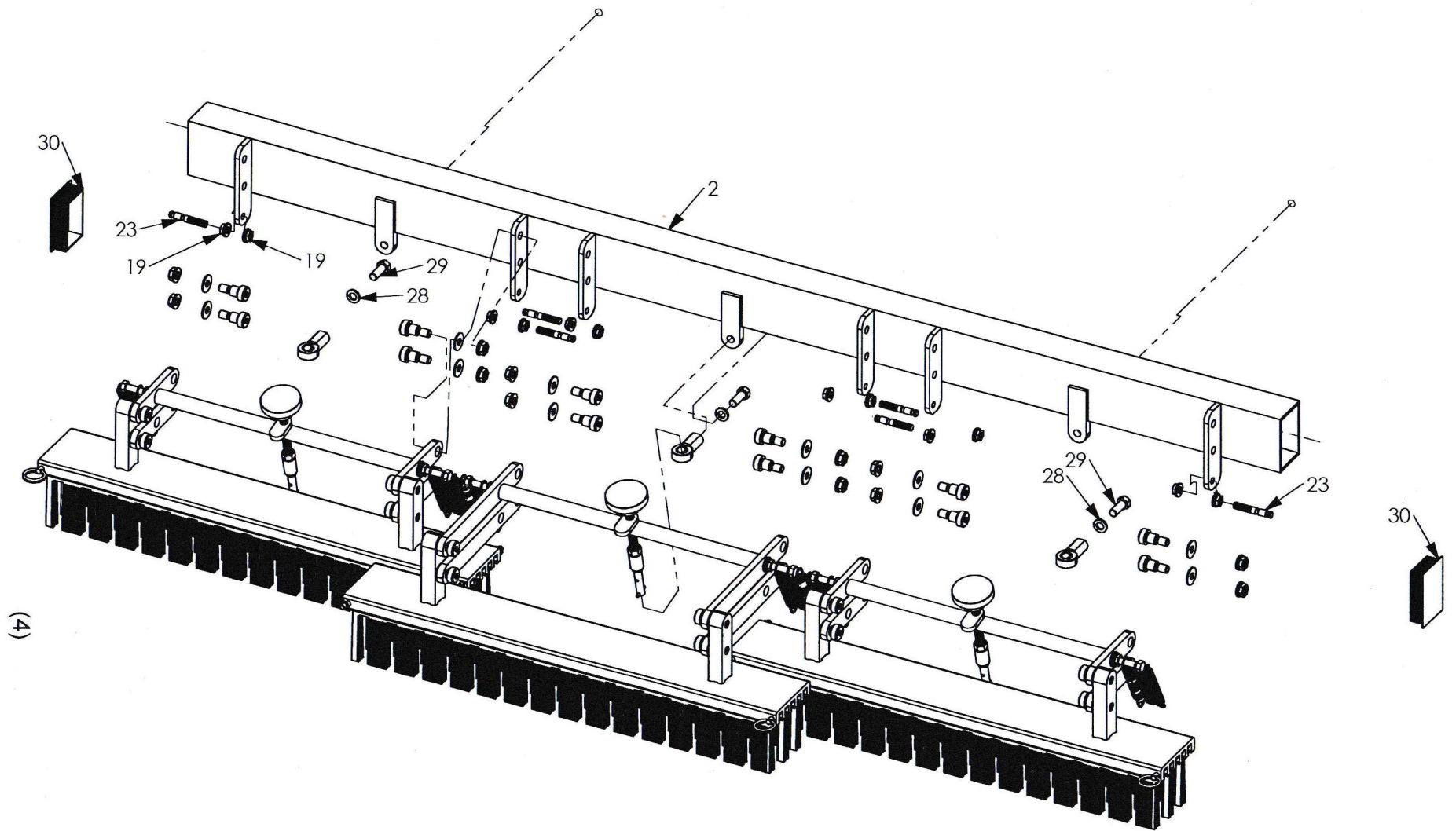
Following the attached chart will allow you to estimate the amount of downward force that each setting will achieve. Due to the leverage and length of the arms on the center unit, spring type and amount connected varies from the end units to achieve equal down pressure on all three units.

Brush strips can be moved around, removed, and even more added to achieve nearly any result you require.

Pressures	Center Brush	End Brushes
Fixed	Fixed	Fixed
10 lbs.	1 Soft Spring	No Springs
15 lbs.	1 Firm Spring	1 Soft Spring
18 lbs.	1 Soft & 1 Firm	2 Soft Springs
25 lbs.	2 Firm Springs	1 Firm Spring



SINGLE BRUSH HEAD  
FOR 3-WAY TOOL BAR  
END UNIT SHOW  
02/28/14 ::: 03/09/16  
05/20/16

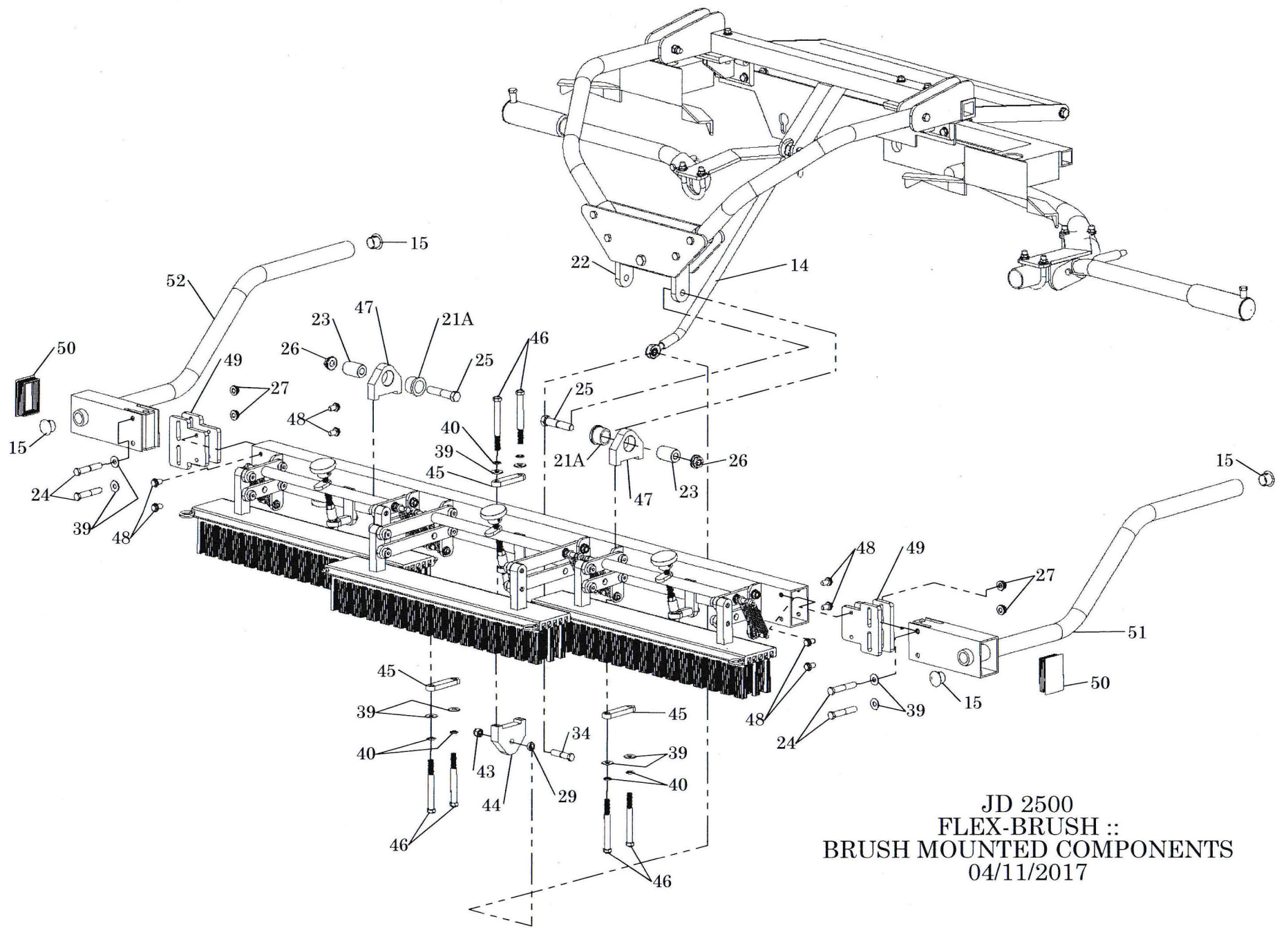


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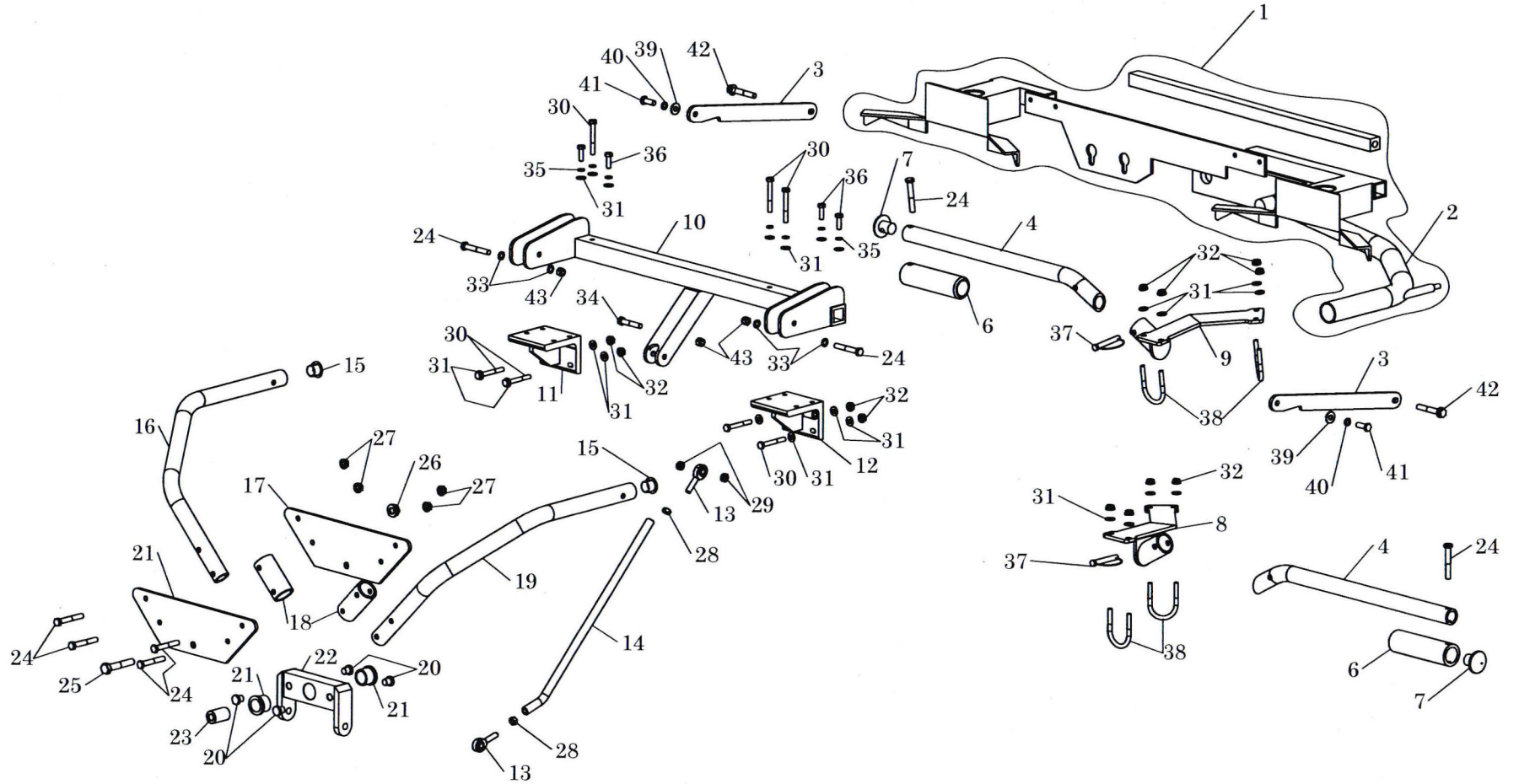
STANDARD BRUSH HEAD  
FOR OPTIONAL MOUNTING  
STYLES  
03/23/16

**BRUSH HEAD PARTS LIST (OPTIONAL MOUNT) 03/23/16 - 06/23/17**

ITEM #	DEPT#	PART #	DESCRIPTION	QTY. FOR FULL HEAD
1	61P	BR-105-1	BRUSH STRIP HEAD (REV "A")	3
2	61P	BR-133-3	MAIN TOOL BAR	1
3	61P	BR-104	HORIZONTAL ARM (SHORT) FOR END UNITS	8
4	H	BR-072	.5" x .375" x 3/8-16 SHOULDER BOLT	24
5	H	1016	3/8-16 SERRATED FLANGE NUT	12
6	H	5013	3/8" MIL SPEC. # MS15795-814 FLAT WASHER	24
7	61P	BR-111	ADJUSTMENT SHAFT	3
8	61P	BR-102	HORIZONTAL ARM (LONG) CENTER UNIT	4
9	61P	BR-112	ADJUSTMENT KNOB	3
10	61P	BR-121	ADJUSTMENT SHAFT MOUNT BASE	3
11	61P	BR-119	ADJUSTMENT CROSS BAR	3
12	61P	BR-114S	BRUSH STRIP (SOFT)	3
13	61P	BR-114FS	BRUSH STRIP (FIRM - SLOTTED)	6
14	H	BR-071	BRUSH STRIP RETAINING PIN	3
15	61P	BR-123	ADJUSTMENT SHAFT LOCK TAB	3
16	61P	BR-124	LOAD SPRING (LIGHT) 2 PER SIDE ON EACH END UNIT. 1 PER SIDE FOR CENTER UNIT	10
17	61P	BR-125	LOAD SPRING (HEAVY) 2 PER EACH SIDE ON CENTER UNIT. 1 PER EACH SIDE ON END UNITS	8
18	H	3147	5/16-18 SMOOTH FLANGE NUT	6
19	H	1147	5/16-16 SERRATED FLANGE NUT	12
20	H	2503	5/16-18 x 2" GR. 5 HEX BOLT	6
21	H	1015	3/8-16 JAM NUT	3
22	H	BR-073	1/8" x 3/4" SPLIT SPRING PIN	3
23	61P	BR-151	SPRING ATTACHMENT STUD	6
24	61P	BR-7127	3/8" FEMALE ROD END	3
25	H	BR-076	1/20 x 4" GR. 5 HEX BOLT	3
26	H	1153	1/4-20 NYLON LOCKNUT	3
27	H	6013	1/4-20 x 1/4" SET SCREW	3
28	H	1010	3/8" SPLIT LOCKWASHER	3
29	H	2502	3/8-24 x 1-3/4" GR. 5 HEX BOLT	3
30	H	BR-079	TUBE PLUG	2



JD 2500  
 FLEX-BRUSH ::  
 BRUSH MOUNTED COMPONENTS  
 04/11/2017

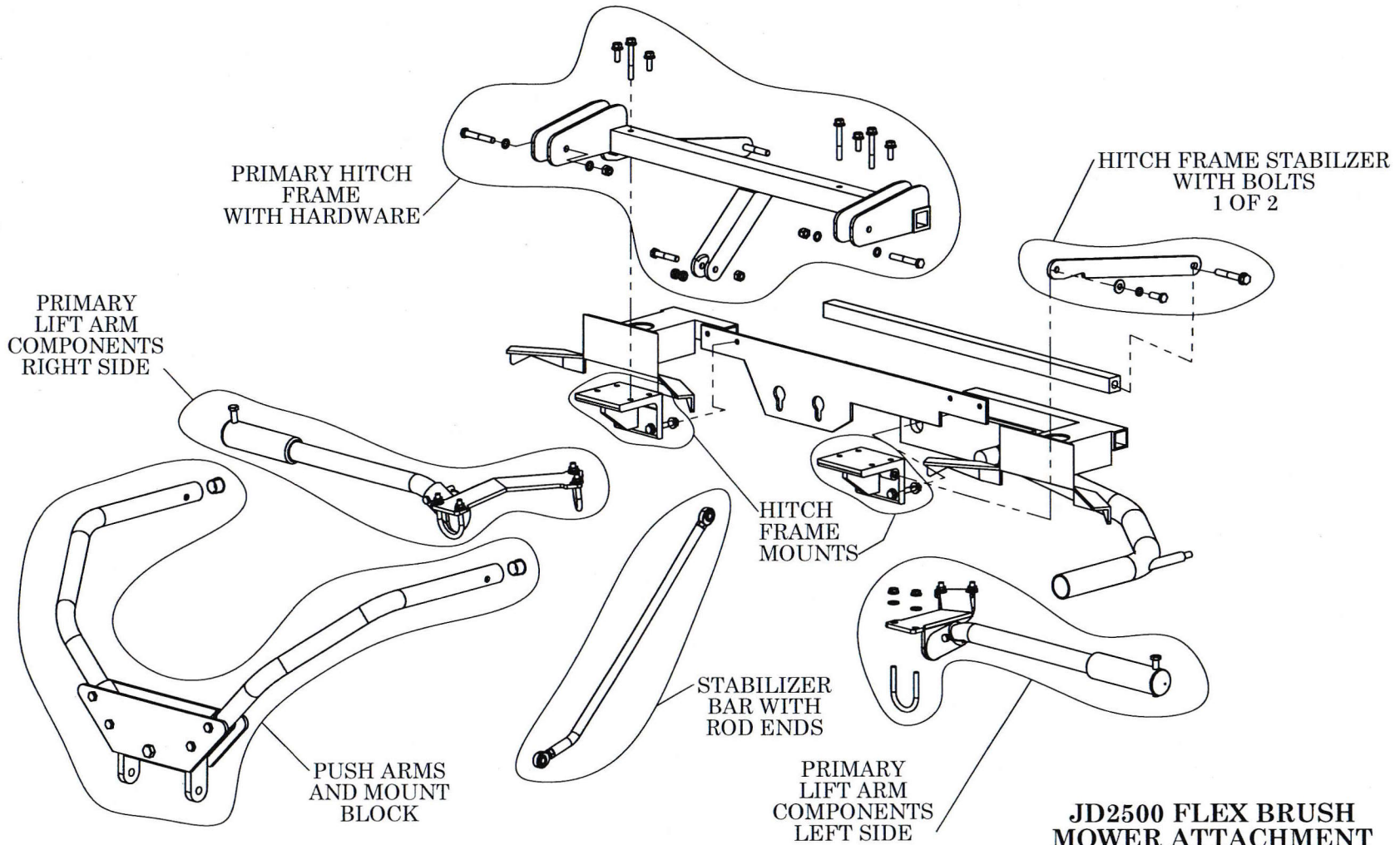


**FLEX-BRUSH  
MOWER MOUNTING  
COMPONENTS  
FOR JD2500  
04/06/2017**

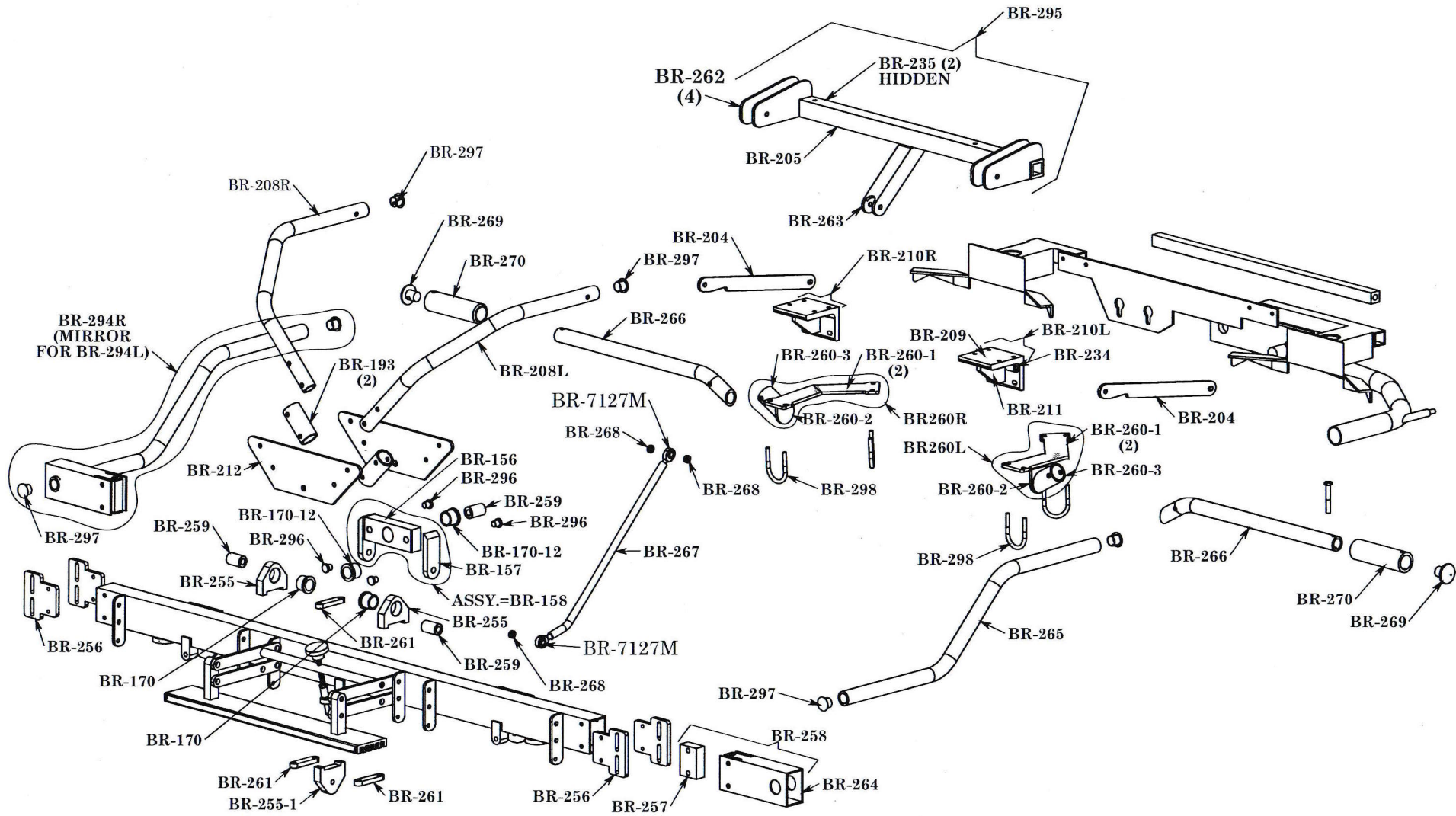
JOHN DEERE 2500 FLEX-BRUSH ATTACHMENT LIST 04/10/2017

ITEM #	DEPT #	PART #	DESCRIPTION	QTY.
1	N/A	N/A	JOHN DEERE FRAME SECTION	REF.
2	N/A	N/A	JOHN DEERE LEFT LIFT ARM	REF.
3	61P	BR-204	HITCH FRAME STABILIZER	2
4	61P	BR-266	LIFT BEAM "A"	2
6	61P	BR-270	LIFT TUBE WEAR SLEEVE	2
7	61P	BR-269	LIFT BEAM END CAP	2
8	61A	BR-260L	LIFT BEAM MOUNT POCKET LEFT SIDE	1
9	61A	BR-260R	LIFT BEAM MOUNT POCKET RIGHT SIDE	1
10	61A	BR-295	MOWER HITCH FRAME	1
11	61A	BR-210R	HITCH ATTACHMENT PLATE RIGHT SIDE	1
12	61A	BR-210L	HITCH ATTACHMENT PLATE LEFT SIDE	1
13	61P	BR-7127M	3/8" MALE ROD END	2
14	61P	BR-267	STABILIZER BAR	1
15	61P	BR-297	TUBE END CAP	2
16	61P	BR-208R	PUSH ARM RIGHT SIDE	1
17	61P	BR-212	HITCH TO BEAM CONNECTOR PLATE	2
18	61P	BR-193	PUSH ARM FORWARD SLEEVE	2
19	61P	BR-208L	PUSH ARM LEFT SIDE	1
20	61P	BR-296	FLEX PREVENTION PAD	4
21	61P	BR-170-12	PIVOT BUSHING ::.75 LONG :: PIVOT BLOCK	2
21A	619	BR-170	PIVOT BUSHING :: 1.0" LONG :: BEAM MOUNT	2
22	61A	BR-158	CENTER PIVOT BLOCK ASSY.	1
23	61P	BR-259	HITCH PIVOT SHAFT	3
24	H	33	3/8-16 x 3" Gr. 5 HEX BOLT	10
25	H	1004	1/2-13 x 2-3/4" GR. 5 HEX BOLT	3
26	H	1026	1/2-13 SERRATED FLANGE NUT	3
27	H	1016	3/8-16 SERRATED FLANGE NUT	8
28	H	1144	3/8-24 HEX JAM NUT	2
29	61P	BR-268	STABILIZER SPACER	3
30	H	1149	5/16-18 x 2-1/2" Gr. 5 HEX BOLT	7
31	H	1008	1/4" USS FLAT WASHER	23
32	H	1147	5/16-18 SERRATED FLANGE NUT	12
33	H	6106	3/8" INTERNAL TOOTH LOCK WASHER	4
34	H	1108	3/8-16 x 2" Gr. 5 HEX BOLT	2
35	H	1013	5/16" SPLIT LOCK WASHER	7
36	H	1101	5/16-18 x 1" Gr. 5 HEX BOLT	4
37	H	BR-081	3/8" x 2" WIRE LOOP PIN	2
38	H	BR-298	5/16-18 x 1-3/4"W U-BOLT	4
39	H	1019	5/16" USS FLAT WASHER	16
40	H	1010	3/8" SPLIT LOSK WASHER	8
41	H	1100	3/8-16 x 1" Gr. 5 HEX BOLT	2
42	H	6022	10mm x 60mm x 1.5mm.P FLANGE HEAD	2
43	H	1180	3/8-16 NYLON LOCK NUT	4
44	61P	BR-255-1	BEAM END STABILIZER MOUNT	1
45	61P	BR-261	LIFT BLOCK CLAMP PLATE	3
46	H	3178	3/8-16 x 4" Gr. 5 HEX BOLT	6
47	61P	BR-255	BEAM PIVOT MOUNT	2
48	H	1067	5/16-18 x 5/8" SERRATED FLANGE HEAD BOLT	8
49	61P	BR-256	BEAM EXTENSION MOUNT PLATE	4
50	H	BR-079	BEAM END CAP	2
51	61A	BR-294-L	BEAM EXTENSION AND LIFT ASSEMBLY LEFT SIDE	1
52	61A	BR-294-R	BEAM EXTENSION AND LIFT ASSEMBLY RIGHT SIDE	1



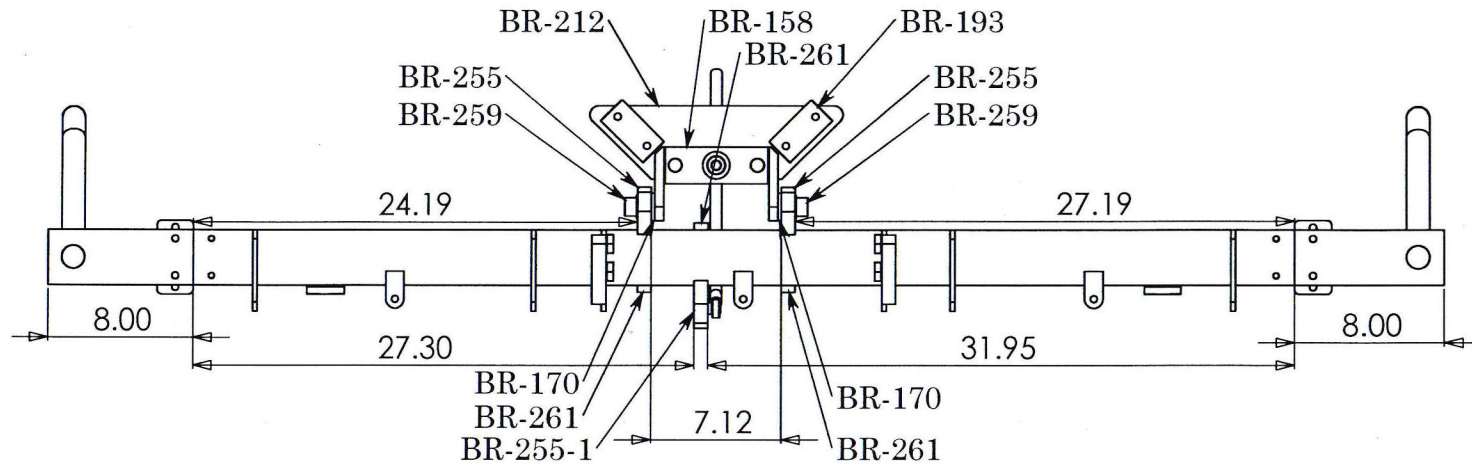


**JD2500 FLEX BRUSH  
 MOWER ATTACHMENT  
 PARTS :: ASSEMBLED  
 04/10/2017**



JD2500 FLEX-BRUSH  
 MAJOR COMPONENTS  
 04/11/2017

**:: VIEW ::  
LOOKING AT  
FRONT OF BRUSH BEAM**



DO TO THE OFF-SET NATURE OF THE JD2500 CUTTING REELS IN RELATION TO THE TRACTION UNIT, THE MOUNTING POSITION NEEDS TO BE AS SHOWN.

INSTALL BEAM PIVOT MOUNTS (BR-255) AS SHOWN USING CLAMP PLATES (BR-261) AND BOLT (H-3187) WITH FLAT AND LOCK WASHERS. POSITION FROM EDGE OF PART TO EDGE OF MAIN BEAM AND TIGHTEN CLAMPS.

FLANGES OF BUSHINGS (BR-170) WILL BE FACING EACH OTHER TOWARDS THE CENTER.

BE SURE THAT CENTER PIVOT BLOCK (BR-158) WILL FIT BETWEEN FLANGES.  
STABILIZER MOUNT (BR-255-1) WILL BE ATTACHED TO THE MAIN BEAM IN THE SAME WAY.

JD25 MOUNT BLOCK  
EXPLANATION  
04/12/2017

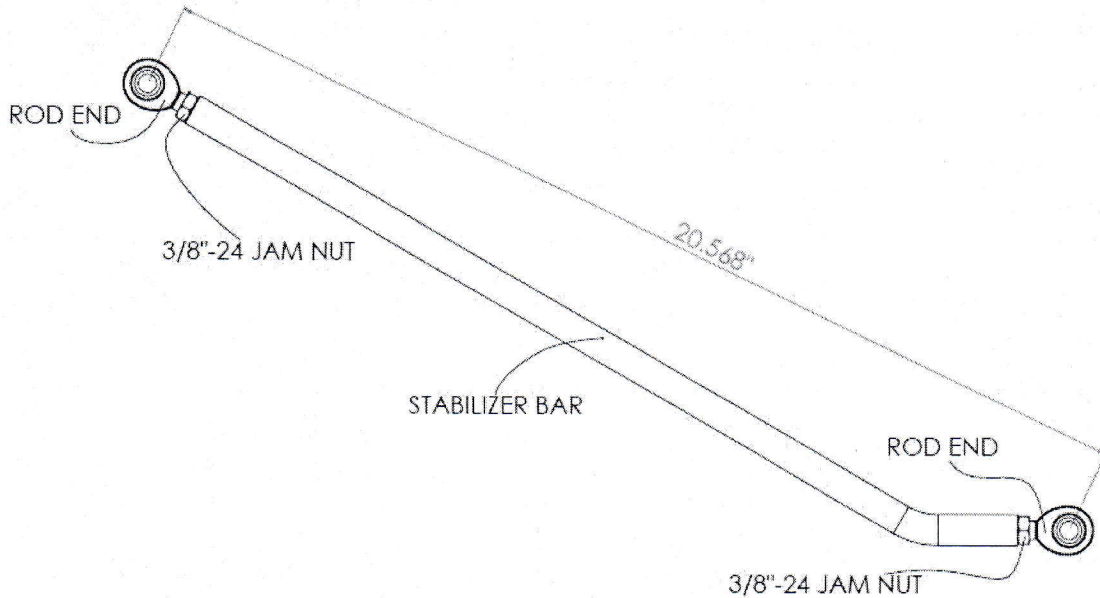
# FLEX-BRUSH FOR JOHN DEERE 2500

## MOUNTING INSTRUCTIONS

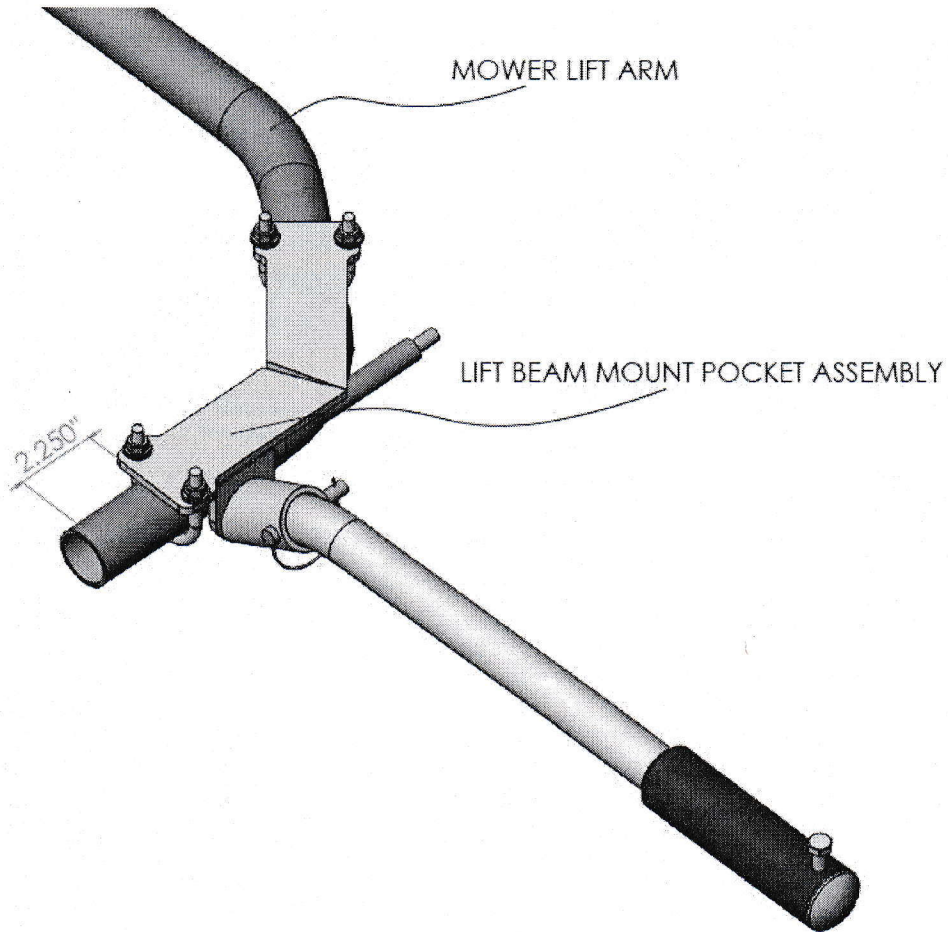
1. The last page of this manual has the primary components circled and described and will be used for reference. Also, pages 6,7,8 are the exploded views and parts list. Parts will be referenced to by their item number on the exploded view sheets.
2. As much as possible, mounting hardware, nuts, bolts etc., will be attached with the component and in the location they are used in.
3. Starting with the "PRIMARY HITCH FRAME" # 10. Remove the hitch frame mounts #11 & #12 from each side, keep these positioned left and right.
4. On the front of the mower are 2 bolts on either side that hold the light bar/up-stop stabilizer assembly in place.
5. Mark the position of the light bar sticking out from main frame, remove the two bolts from the mower. Light bar unit may drop down, be careful not to let it fall. Remove nuts #32 & washer #31 from mounting bolts #30. Install hitch frame mounts accordingly, replace washers and nuts and leave slightly loose.
6. Set main hitch frame on top of these mounts and replace all bolts originally removed and tighten.
7. Now tighten the four bolts through the front of the mower frame. Be sure light bar assemblies are in original position.
8. Install hitch frame stabilizer #3 to each side. There is a threaded boss on each lift fame mount for the forward bolt #41. Install this and leave loose. At the back end of this bar there will be a 10mm flange head bolt through the side of the mower deck with a nut on the opposite side. Remove the factory bolt and replace with the supplied / longer bolt # 42 and factory nut and then tighten both the forward and rear bolts.
9. Locate both lift beam pockets. #8 & #9. These will rest on top of each lift arm, with the angled tube pockets of each pointing to the outside of the mower.
10. Remove the U-bolts #38 and rest each part on top of their respective lift arm. Align and replace U-bolts. Set front edge of each bracket 2-1/4" back from front of lift tube, not including brass bushing.
11. With mower on flat ground or shop floor, hold so that lift arm # 4, when installed, will be as near horizontal as possible while lift arms are down with cutting units attached and tighten all U-bolts.
12. Install one each lift arm #4 to lift pocket and secure with wire loop pin #37.
13. Locate push arms and mount block. #15 thru #27. All bolts are loose. Remove the four #24 bolts and install push arm #16 and #19 to appropriate sides (left or right) into sleeves #18, align and replace bolts and nuts and tighten them as well as tightening #25 and #26. BE SURE THAT MOUNTING HOLES IN OPPOSTIE END OF PUSH ARMS ARE CONCENTRIC TO EACH OTHER, AND FORM A PARALLEL LINE THAT WILL ALIGN INTO HITCH FRAME.
14. Remove stainless pivot shafts # 23 from legs of center pivot block #22. Set push arm assembly in between bushings on brush mount blocks # 47, align holes, replace bolt # 25 through pivot block leg, then through the pivot shaft # 23 and install nut #26. Do this for each side and tighten.
15. Remove bolts #24 from hitch frame. Keep one lock washer on each bolt. Align and install push arms between plates and re-install bolts. Be sure that one lock washer #33 is under the head of the bolt and one under the nut. This will prevent bolt from rotating within hitch frame.
16. Tighten bolts to the point that there is still freedom to float up and down between the plates.
17. Install stabilizer arm #14. Remove bolt # 34 from hitch frame. Do not lose spacers #29. Install stabilizer into slot, one spacer on each side of rod end, replace bolt, install nut and tighten.
18. Remove nut #43 from bolt #34 from mount #44 from below brush. Align opposite rod end of stabilizer #14 and replace bolt, spacer #29 is between rod end and mount, add nut and tighten.
19. Add beam extension lift tube assemblies #51 & #52. Mounting plates #49 will be mounted loosely in main brush beam. Remove bolts and nuts #24 & #27 from extensions, slip extensions into place allowing plates #49 to fit into slots of extension blocks. When full on, replace bolts and washers. (Intent is for the extension block to be the same height as main beam frame. However, if necessary, extensions can be slid up or down to better suit lift and or drop requirements.)
20. All is now installed follow, recommendations on page 1 for final set-up.
21. To remove brush: remove the two bolts connecting the push arms #16 & #19 from main hitch frame #10. Remove stabilizer from mount at main hitch frame also.
22. Remove lift arms #4 & #5. All else remains attached for normal operation.

## Flex-Brush for John Deere 2500 Height Adjustment Instructions

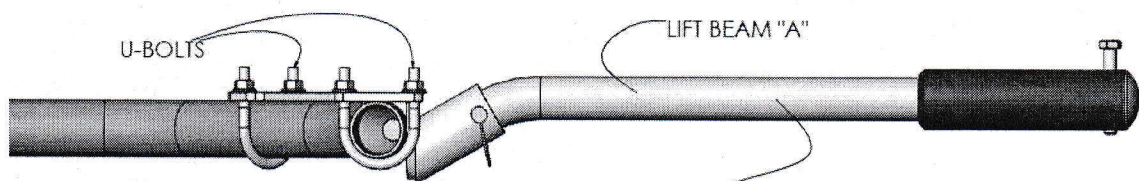
1. After the brush is installed, it may be necessary to adjust the brush height to ensure only the bristles contact ground.
2. Brush heights adjustments should only be performed on flat ground or a shop floor with the cutting units in the down position.
3. First, you will need to check that the adjustable linkages are at the correct length. Verify that the Stabilizer Bar with Rod Ends has a length of approximately 20.568" from center to center. If not, adjust the linkage to approximately this length.



4. Second, check that the correct number of springs are attached on each brush head to give you the desired pressure. Please note, the brush is shipped with no springs attached.
5. To adjust the brush height, check that the primary lift arms are mounted properly. The Lift Beam Mount Pocket Assemblies should be placed on top of their respective mower lift arms with the front edge of each Lift Beam Mount Pocket Assembly approximately 2-1/4" back from the front of the lift arm tube as shown below.



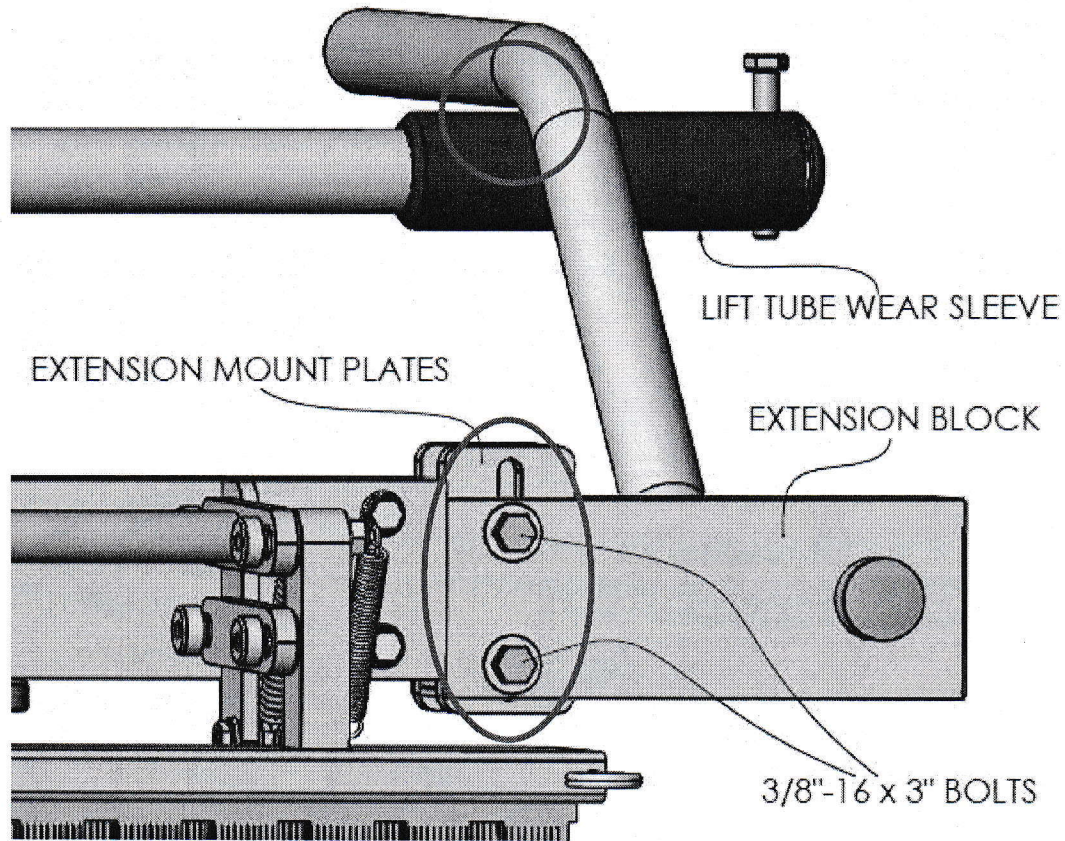
6. With Lift Beam "A" installed into both side pockets, align the Lift Beams as near horizontal as possible by loosening and re-tightening the U-Bolts. Pressure will need to be released from the system by propping up the brush before leveling the Lift Beams.



LIFT BEAM "A" SHOULD BE AS NEAR HORIZONTAL AS POSSIBLE WHEN THE MOWER IS ON FLAT GROUND OR A SHOP FLOOR AND THE CUTTING UNITS ARE IN THE DOWN POSITION.

7. With the Lift Beams positioned properly, relax the system and check to see if there is approximately 4" of clearance between the bottom of the main rectangular brush beam and the ground. The intent is for the extension blocks to be in line with the main brush beam.
8. If so, your brush should now be at the ideal height and ready for operation.
9. If not, place a spacer approximately 6" tall between the shop floor and the bottom of the main rectangular brush beam. This added height will allow the beam and system to relax to the ideal height after the height is adjusted and the block/spacer is removed.

10. While the brush is sitting on the block/spacer, the Beam Extension and Lift Assemblies can be properly positioned. This is done by first loosening the four  $3/8''-16 \times 3''$  bolts and associated flange nuts and sliding the assembly in the slots of the Extension Mount Plates until the beam of the lift assembly sits on top of the Lift Tube Wear Sleeves.



11. Retighten the four  $3/8''-16 \times 3''$  bolts and associated flange nuts.
12. Remove the Block/Spacer and check that the bottom of the main rectangular brush beam is approximately 4" off the ground. If not, adjust the height of the block/spacer and repeat steps 9 & 10 as needed until the clearance distance is approximately 4".