



42" & 48" Lawn Sweeper

IP4422 & IP4423

INSTALLATION INSTRUCTIONS

42" & 48" Lawn Sweeper IP4422 & IP4423

COMPONENTS

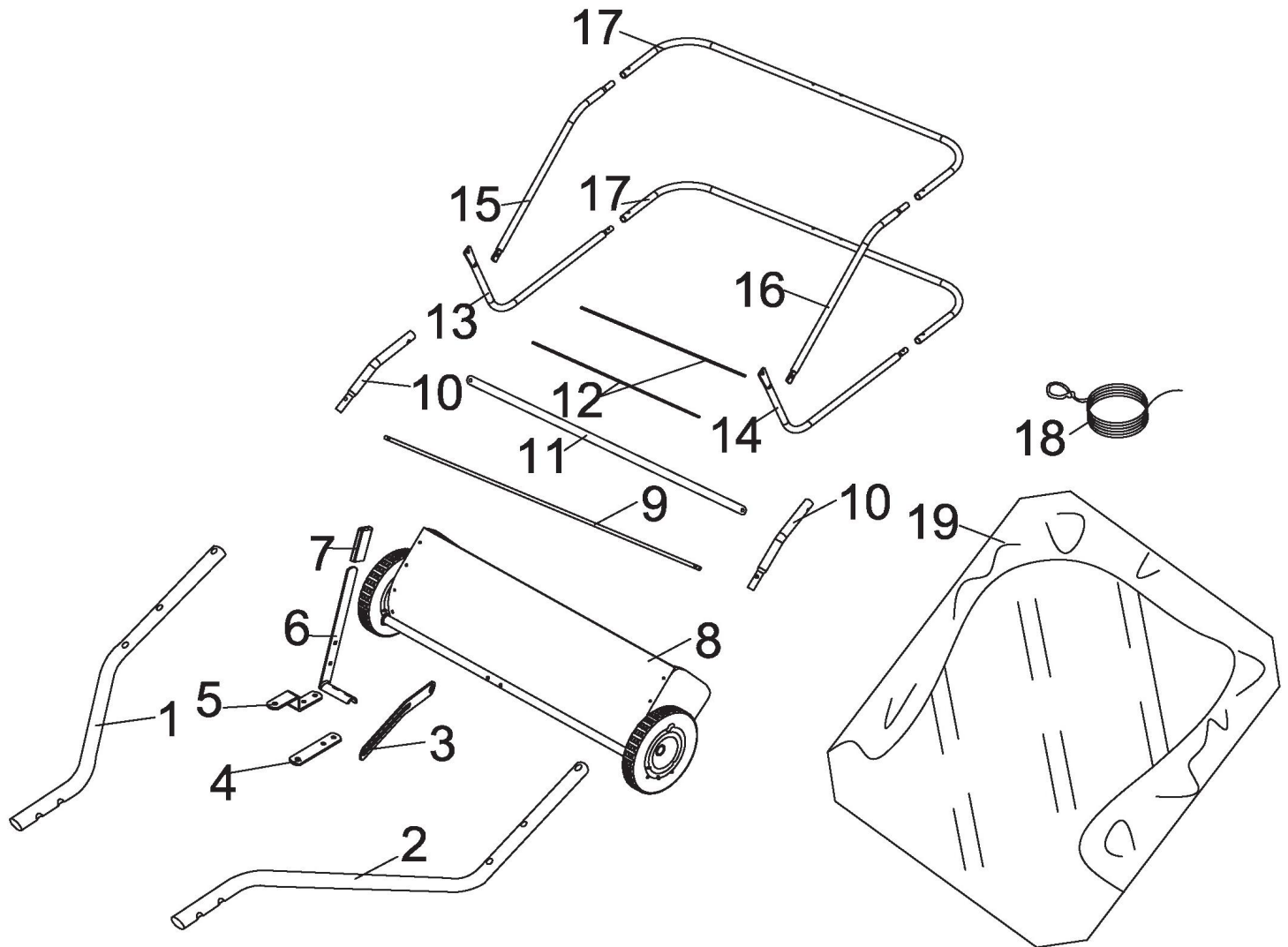


Please verify that all hardware and parts are included in your package. For replacement parts, visit www.motoalliance.com

Part#	Qty	Item Description
1	1	Hitch Tube - R.H.
2	1	Hitch Tube - L.H.
3	1	Height Adjustment Bracket
4	1	Hitch Bracket (Straight)

Part#	Qty	Item Description
5	1	Hitch Bracket
6	1	Height Adjustment Handle
7	1	Handle Grip
8	1	Sweeper Housing Assembly
9	1	Front Support Rod
10	2	Bag Arm Tube
11	1	Bag Frame Strap
12	2	Hopper Support Rod

Part#	Qty	Item Description
13	1	Lower Hopper Side Tube (Right)
14	1	Lower Hopper Side Tube (Left)
15	1	Upper Hopper Side Tube (Right)
16	1	Upper Hopper Side Tube (Left)
17	2	Rear Hopper Tube
18	1	Rope
19	1	Hopper Bag



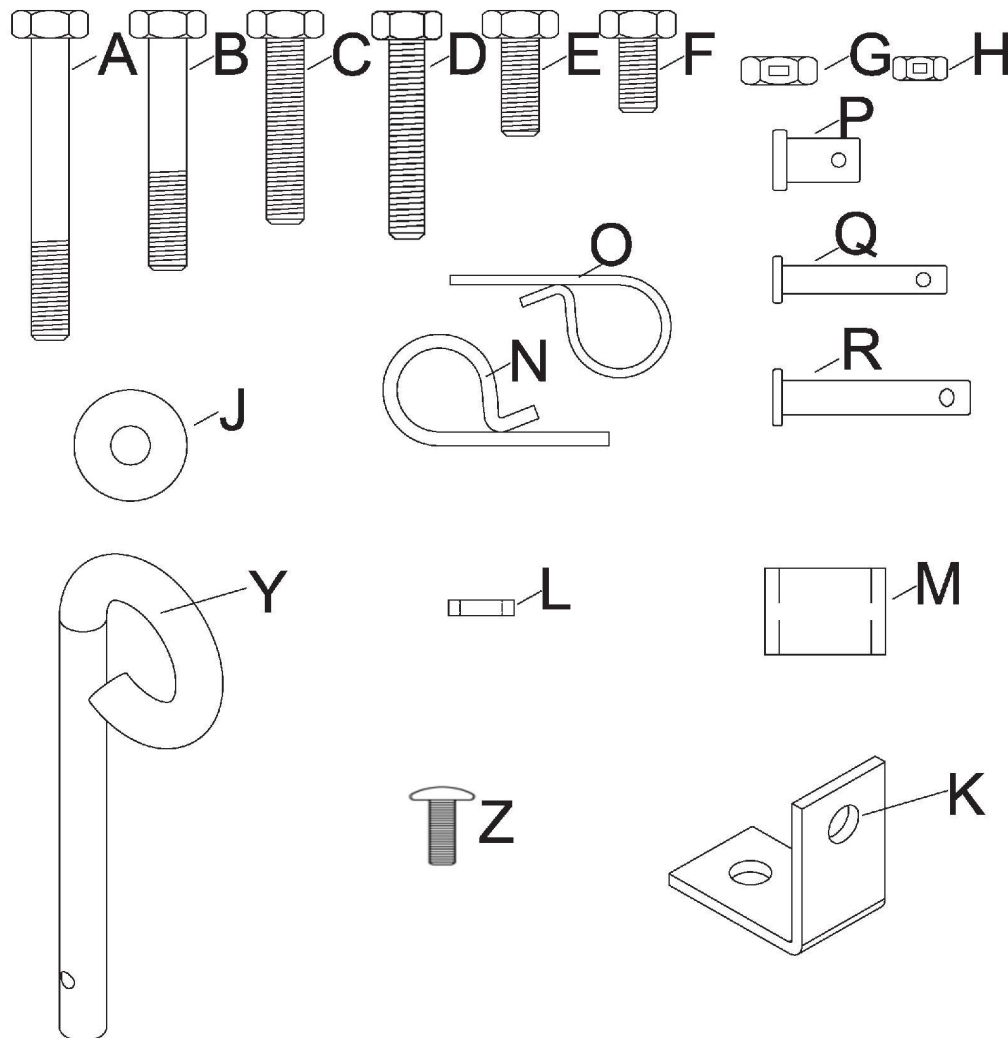
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HARDWARE

Part#	Qty	Item Description
A	2	Hex Bolt M8 x 65
B	2	Hex Bolt M8 x 50
C	2	Hex Bolt M8 x 40
D	4	Hex Bolt M8 x 45
E	1	Hex Bolt M8 x 20
F	1	Hex Bolt M8 x 16
G	12	Nylon Lock Nut M8

Part#	Qty	Item Description
H	4	Nylon Lock Nut M6
J	2	Oversize Washer 8mm
K	1	Angle Bracket
L	1	Adjustable Pole Spacer
M	2	Hitch Spacer
N	5	R Pin 3mm

Part#	Qty	Item Description
O	4	R Pin 2 mm
P	2	Clevis Pin 10 x 20 mm
Q	2	Clevis Pin 6 x 30 mm
R	2	Clevis Pin 8 x 40 mm
Y	1	Hitch Pin
Z	4	Cup Head Bolt M6 x 25



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ASSEMBLY

1. Take out all the small parts from the box and verify all pieces are present.
2. Assemble the angle bracket to the sweeper housing using a M8 x 16 hex bolt (F) and a Nylon Lock Nut M8 (G). Make sure the bracket is turned as shown and aligned straight with the housing and then tighten.
3. Assemble the R.H. hitch tube to the sweeper housing using two M8 x 45 Hex bolts (D), M8 nylon lock nuts (G). Do not tighten yet. Repeat for the L.H. hitch tube.
4. Fasten the hitch tubes together using two M8 x 65 hex bolts (A), and M8 nylon lock nuts (G). Do not tighten yet.

If your tractor hitch has 10" to 13" ground clearance refer to IMAGE 4. If your tractor hitch has 9" to 10" ground clearance refer to IMAGE 5.

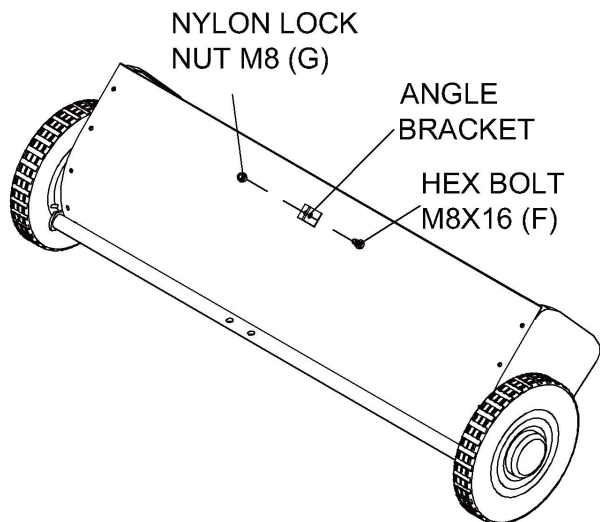


IMAGE 1

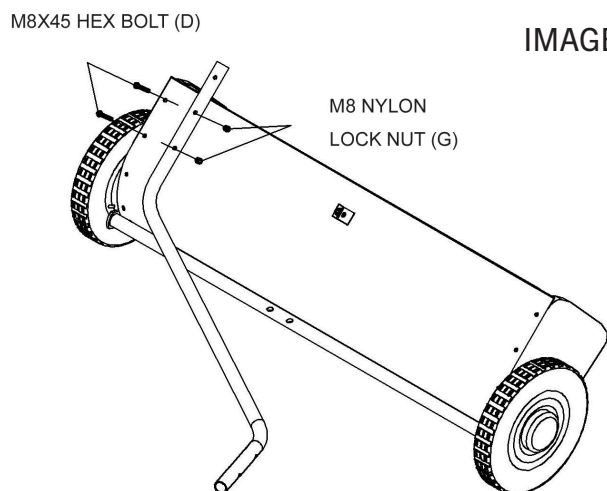


IMAGE 2

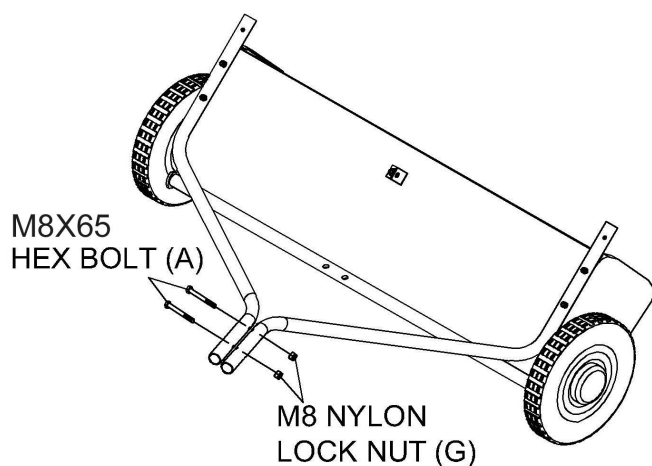


IMAGE 3

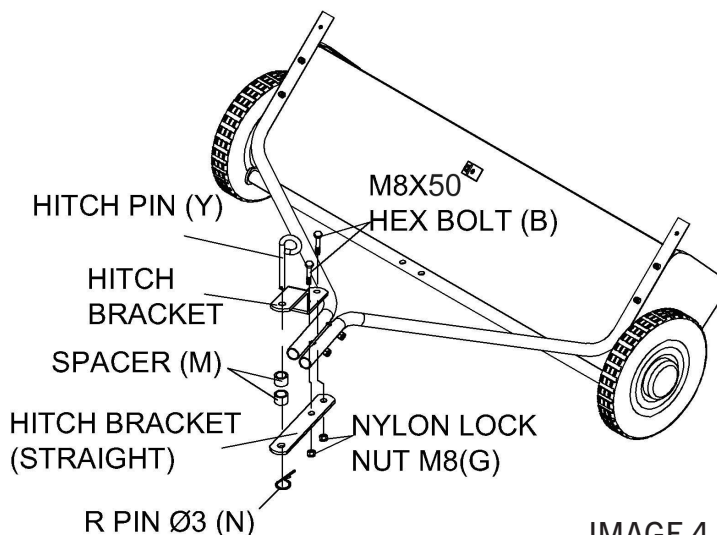


IMAGE 4

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5. Assemble the hitch brackets to the hitch tubes using two M8 x 50 hex bolts (B) and M8 nylon lock nuts (G). The bolts should straddle the front hitch tube bolt. Do not tighten yet.
6. At this time tighten the four bolts fastening the hitch tubes to the sweeper housing. Next, tighten the two bolts fastening the ends of the hitch tubes together. Finally, tighten the two bolts fastening the hitch brackets to the hitch tubes.

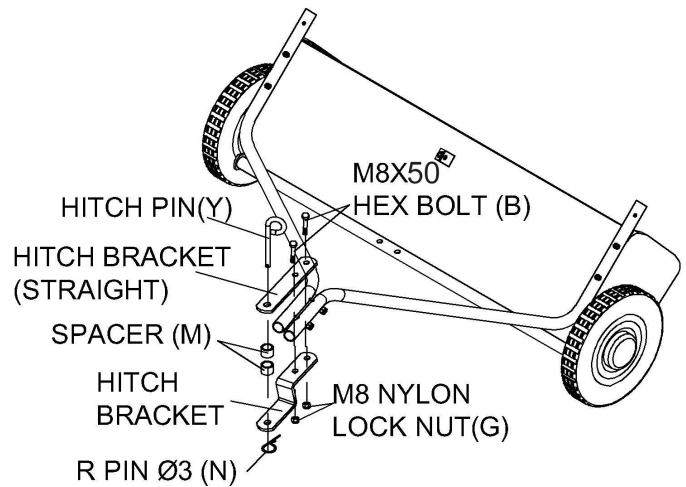


IMAGE 5

7. Assemble the hitch pin (Y), two spacers (M) and the 3mm R Pin (N) to the hitch brackets.

8. Assemble the height adjustment handle to the height adjustment tube as shown in figure six. Use two M8 x 40 hex bolts (C) and M8 Nylon Lock nut (G). Do not tighten yet.

9. Assemble the grip onto the height adjustment handle.

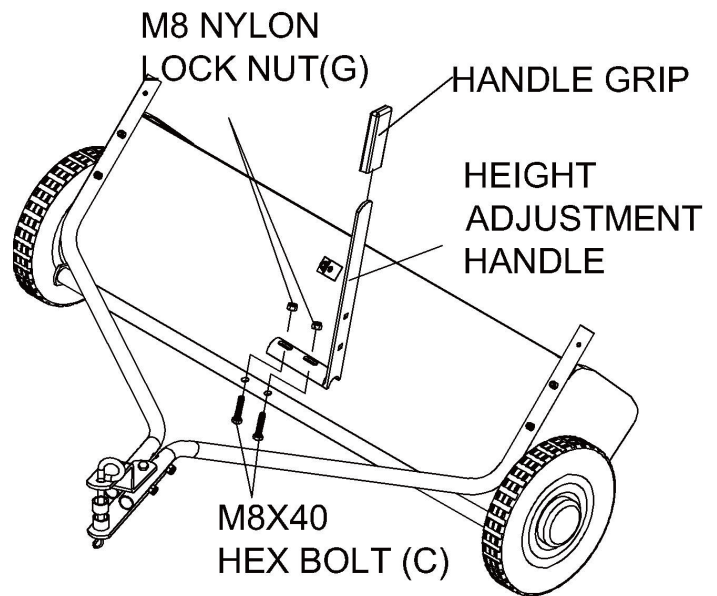


IMAGE 6

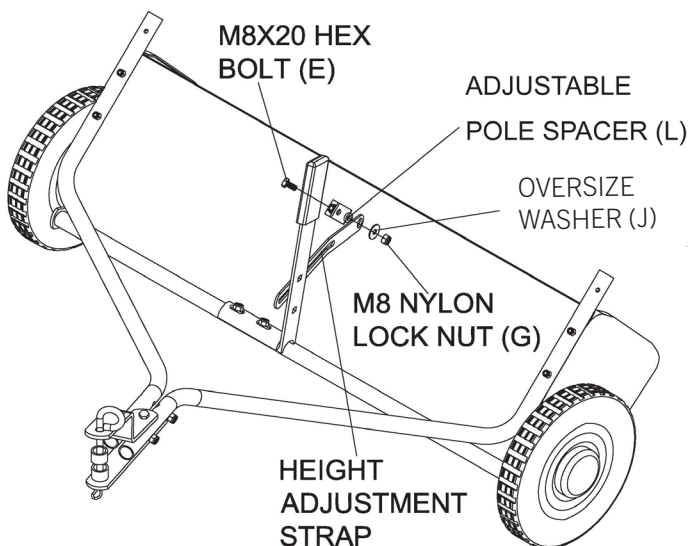


IMAGE 7

10. Insert a M8 x 20 hex bolt (E) through the angle bracket. Assemble onto the bolt the adjustable polew spacer (L), the height adjustment strap, a big flat washer 8mm (J) and a M8 nylon lock nut (G). Tighten.

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11. Position the height adjustment handle side to side so that the wear washer and big flat washer can fit between the handle and the height adjustment strap. Tighten the nuts securing the height adjustment handle.

12. Insert the carriage bolt M8 x 30 through the height adjustment handle. Assemble onto the bolt, in order the bolt, the height adjustment handle, the wear washer, the height adjustment strap, the wear washer, the big flat washer, and the plastic knob.

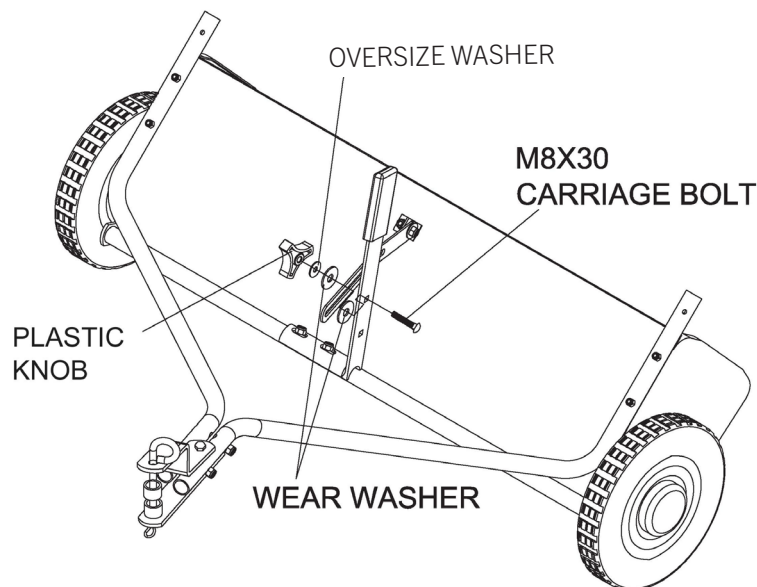


IMAGE 8

ASSEMBLY OF THE HOPPER BAG

1. Turn a rear hopper tube so that the brace holes in the middle of the tube face down. Slide the tube through the four loops sewn to the top rear seam inside the hopper bag.

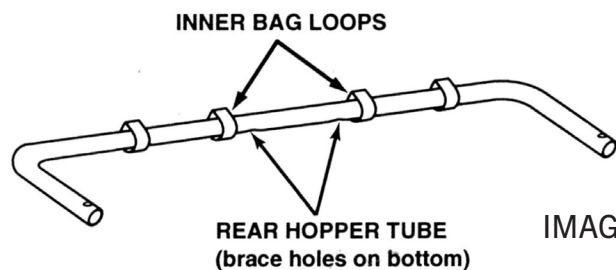


IMAGE 9

2. Insert the two upper hopper side tubes through the stitched flaps on each side of the hopper bag.

3. Assemble the ends of the rear hopper tube onto the ends of the upper hopper side tubes. Fasten together using Cup Head Bolt M6 x 25 (Z) and M6 Nylon Lock Nut (H).

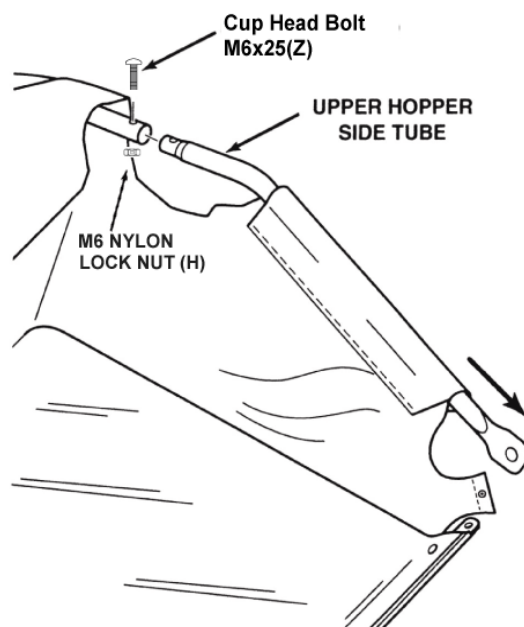


IMAGE 10

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4. Turn the second rear hopper tube so that the brace holes in the middle of the tube face up. Assemble the ends of the rear hopper tube onto the ends of the lower hopper side tubes. Fasten together using Cup Head Bolt M6 x 25 (Z) and M6 Nylon Lock Nut (H).

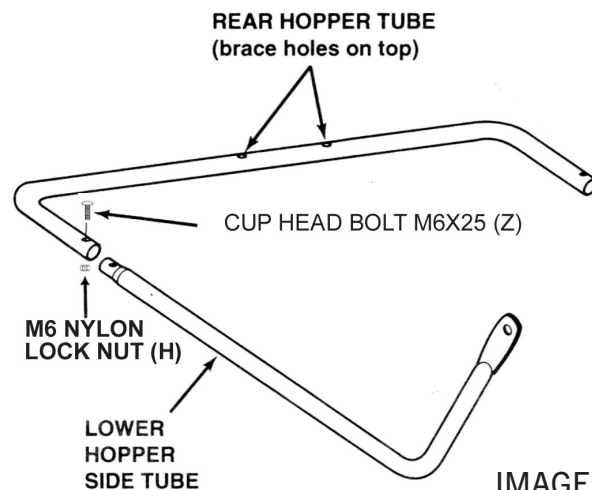


IMAGE 11

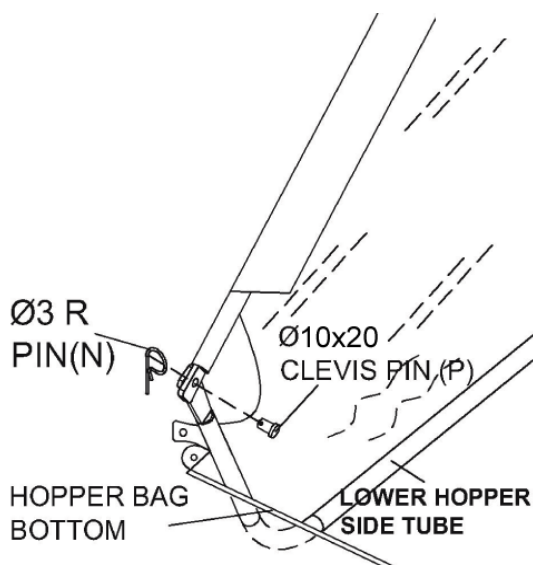


IMAGE 12

5. Place the assembled lower hopper tubes into the bottom of the hopper bag.
6. Attach the ends of the lower hopper side tubes to the inside of the upper hopper side tubes using two 10 x 20 clevis pins (P) inserted from the inside, and two 3mm R pins (N).

7. Insert the bag frame strap into the stitched sleeve along the front edge of the bag bottom.
8. Assemble the bag frame strap to the lower hopper side tubes using two 6 x 30 clevis pins (Q) and 2mm R pins (O).

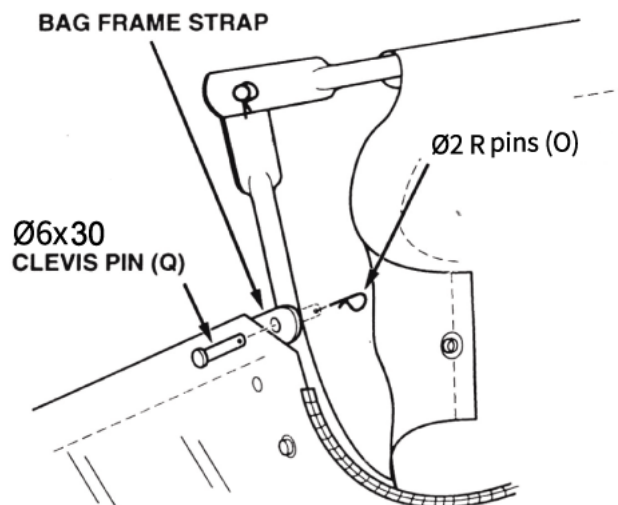


IMAGE 13

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9. Secure the bag corners around the lower hopper side tubes by snapping the bag flaps to the bag bottom on both sides.

NOTE: Do not over bend the support rods during the following step. Over bending will cause the steel rods to loose supporting tension.

10. Tip the hopper onto its back to assemble the two hopper support rods. Place the ends of each rod into the upper and lower rear hopper tubes, bending the rod just enough to fit into the holes in the tubes.

11. Insert the Front Support Rod through the lower hole in each upper hopper side tube and assemble the bag arm tube and secure it with a 3mm R pin (N).

12. Assemble a vinyl cap onto the end of each bag arm tube.

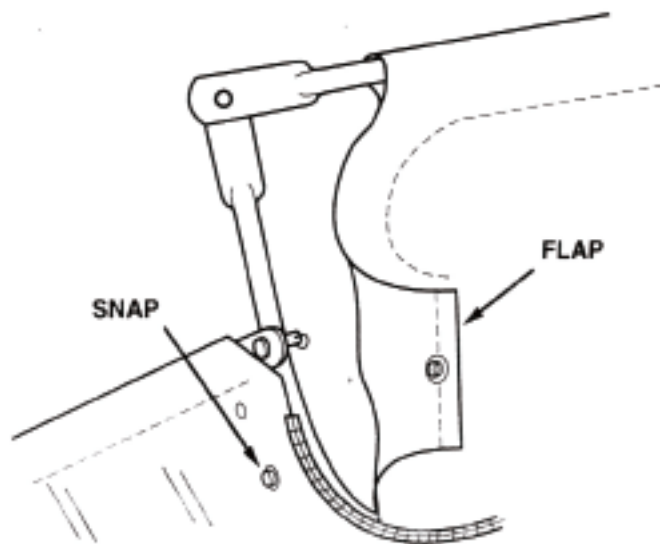


IMAGE 14

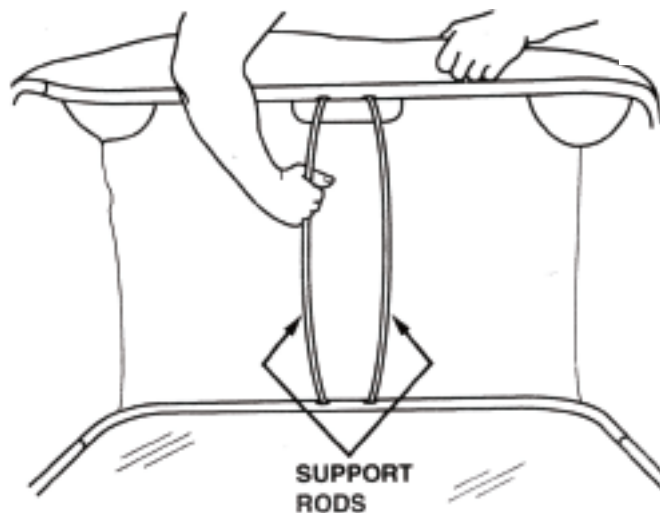


IMAGE 15

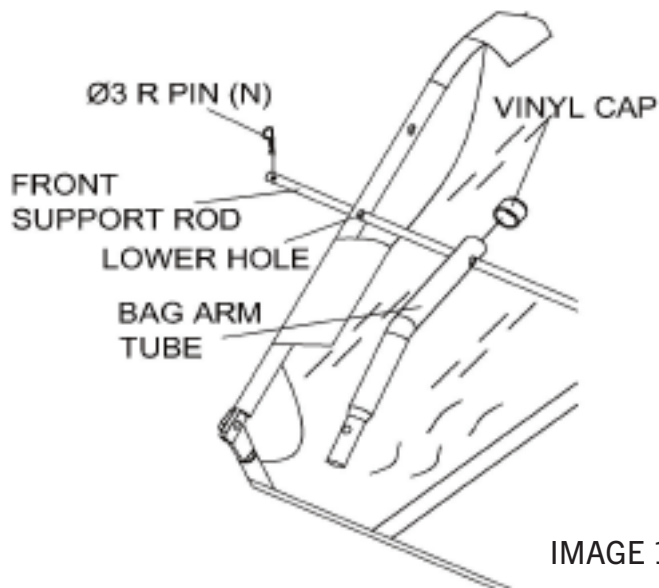


IMAGE 16

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13. Secure the rope to the top center of the hopper bag frame.
14. To assemble the hopper bag to the sweeper, slide the ends of the bag arm tubes into the ends of the sweeper's hitch tubes and secure with two 8x40 clevis pins (R) and 2mm R pins (O).

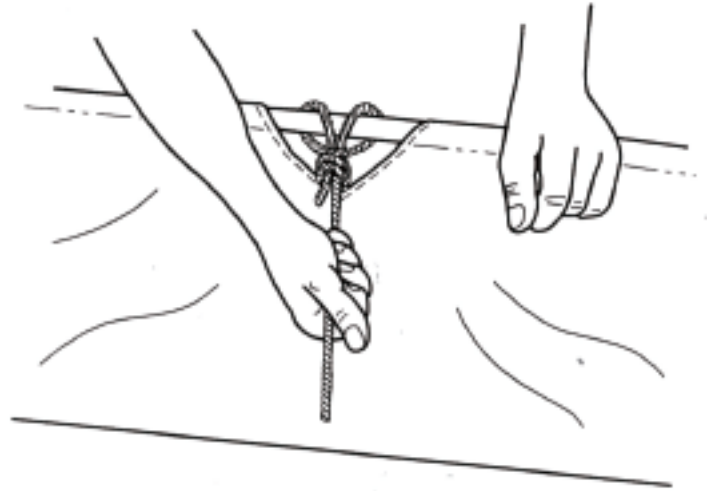


IMAGE 17

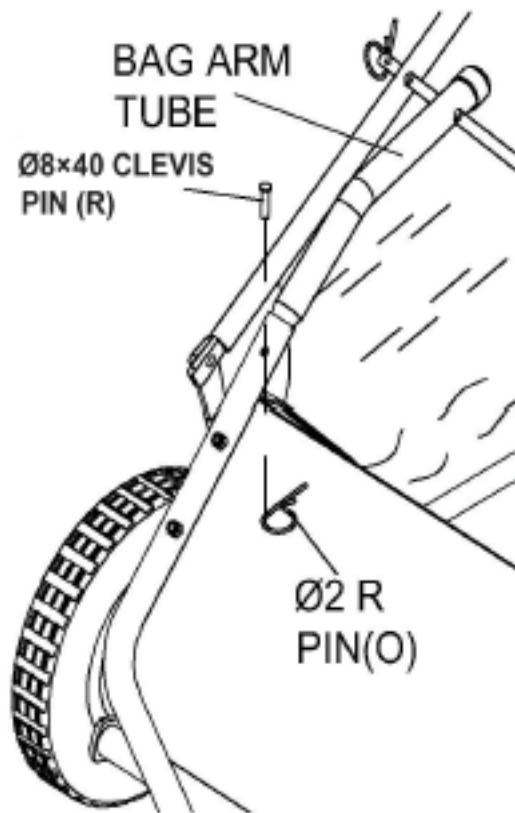


IMAGE 18

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ATTACHING SWEEPER HITCH TO TRACTOR

1. Place the tractor and sweeper on a flat level surface.
2. Set the sweeper height adjustment handle to about the middle of its adjustment range
3. Attach the sweeper hitch brackets to the tractor hitch, arranging the 3/4" spacers so that the bottom of the sweeper bag is approximately level and 5" to 7" above the ground. See figure 20 for tractor hitches that are 10" to 13" above the ground. See figure 21 for tractor hitches that are 8" to 10" above the ground. **NOTE:** For best performance, the bottom of the sweeper bag should be approximately level and 5" to 7" off the ground as shown in figure 19.

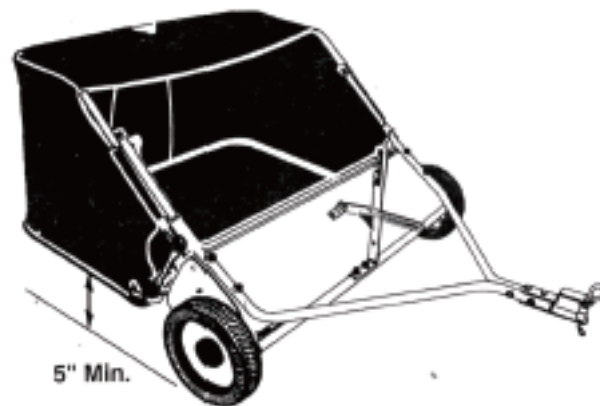


IMAGE 19

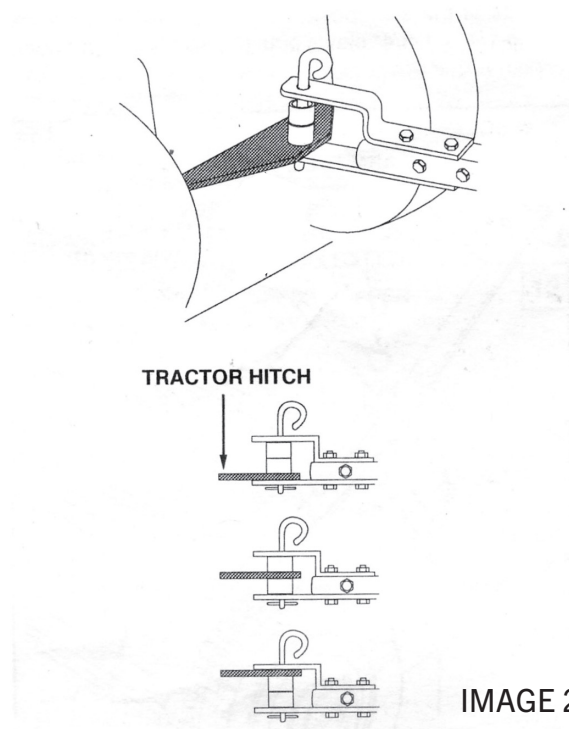


IMAGE 20

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HOW TO USE YOUR SWEEPER

Brush Height Adjustment

To adjust your sweeper brushes to the best operating height, loosen the adjustment knob and push down on the height adjustment lever to raise the brush. Best adjustment is when the brush setting is 1/2" down into the grass. Always mow the grass to an even height before sweeping.

Sweeping Speed

Try a starting speed of approximately 3 m.p.h. (third gear on most tractors). Depending on the conditions, it may be necessary to adjust the sweeping speed in order to achieve best results.

Dumping Of Sweeper

Your sweeper can be dumped easily without getting off of the rider or tractor. Simply pull the rope forward to dump the hopper. Always empty hopper after each use.