



OWNER'S MANUAL

PolyVAC System™

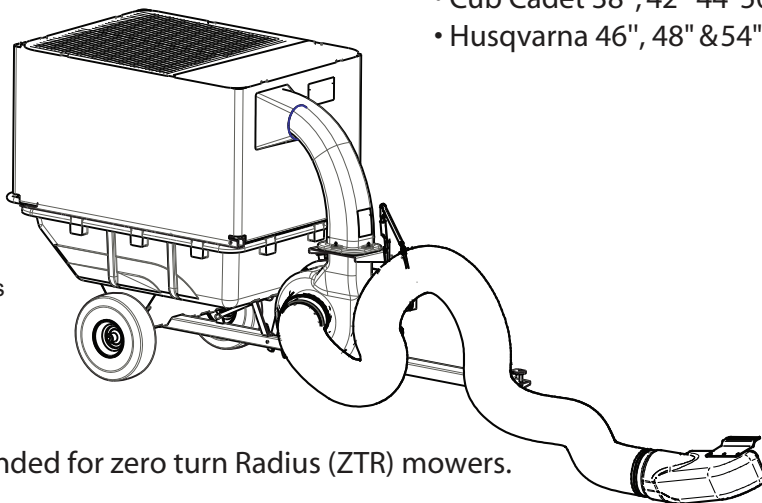
MODEL:

LVS-33 BH

LVS-33 BHK

- Assembly
- Installation
- Operation
- Repair Parts

For use with
Lawn/Garden Tractors



NOT recommended for zero turn Radius (ZTR) mowers.

LVS-33BH PolyVAC System fits the following mower deck sizes of current tractor models:

- John Deere 42", 48" & 54" • MTD 38", 42" & 46"
- John Deere "X" Series - 42", 48", 54" & 62"
- Murray 40", 42" & 46" • Troy-Bilt 42", 42"
- Craftsman 42", 46", 48" & 50" • Bolens 38" & 42"
- Cub Cadet 38", 42" 44"50" • Stanley 42" & 46"
- Husqvarna 46", 48" & 54"

Congratulations on your purchase! Your Lawn-Vac will require significant assembly time. Depending on your skills; you should plan on 4 to 8 hours for assembly. Please call us at 877-728-8224 if you have questions regarding the assembly or operation of your Lawn-Vac.

Note: Warranty registration required! Please make sure you send in the warranty card with required information and record the serial numbers below.

Serial Number: _____

Engine Number: _____

For the latest product updates and setup tips:

Visit us on the web!
www.brinly.com

Important: This manual contains information for the safety of persons and property. Read it carefully before assembly and operation of the equipment!

CONGRATULATIONS on your new Brinly-Hardy Lawn Vac System! Your Lawn Vac has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you can not easily remedy, please do not hesitate to contact our knowledgeable customer service department toll-free at 1-877-728-8224.

CUSTOMER RESPONSIBILITIES

Please read and retain this manual. Familiarize yourself with the entire manual before beginning and verify that all hardware is present. And please, always observe the "Safety Rules". Read and Observe the "Safety Rules".

Follow a regular schedule in maintaining, caring-for and using your Brinly-Hardy Lawn Vac System.

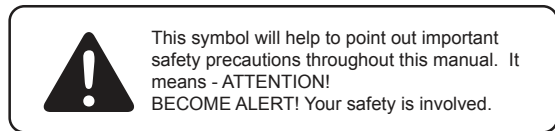
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RULES FOR SAFE OPERATION

- Know controls and how to stop quickly, READ THE TRACTOR OWNER'S MANUAL.
- Do not allow children to operate the vehicle, do not allow adults to operate without proper instruction or without having read the owner's manual.
- Do not carry passengers. Keep children and pets a safe distance away.
- Keep your eyes and mind on your tractor/attachment and area being covered. Do not let other interests distract you.
- Do not drive close to creeks, ditches and public highways.
- Watch out for traffic when crossing or near roadways.
- Keep the vehicle and attachment in good operating condition and keep safety devices in place.
- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- The vehicle and attachment should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.

- See tractor equipment owner's manual for safe operation of the equipment.
- STOP ENGINE when servicing, cleaning, or installing the hose or chute.
- NEVER operate the blower without chutes and hoses securely in place.
- NEVER operate the engine unless it is firmly attached to the Lawn Vac chassis.
- NEVER open canopy unless blower engine is stopped. ALWAYS wear protective eyewear.
- DO NOT STAND behind cart in the exhaust discharge area when blower engine is running!
- ALWAYS keep shields, guards, and hoses securely attached.
- NEVER attempt to clear a clog with the engine running.
- BURNS can be caused by hot exhaust.
- FIRES can be started by build-up of debris and dirt on the engine and surrounding areas. Keep your unit clean.
- NEVER fill the gas tank with the engine running. Allow time for cooling before refueling.
- Never operate the mower unless the grass deflector or the deck adapter and hose provided with your Lawn Vac are in place.
- Do not carry passengers. Keep children and pets a safe distance away.
- Always wear substantial footwear. Do not wear loose fitting clothing that can get caught in moving parts.
- Do not exceed 4 mph. Not for highway use.
- Stay off steep slopes and grades.
- Stay alert for holes in the terrain and other hidden hazards.
- Do not load cart with more than 650 pounds.
- Do not allow others near the equipment when operating equipment.
- Heavy loads will affect vehicle braking and stability. Consult your tractor owner's manual.
- Due to the extended wheelbase of the Lawn Vac, turning will require more area than normal conditions.



TOOLS REQUIRED FOR ASSEMBLY:

- * 1/2" wrench (2),
- * 5/16" Wrench
- * 7/16" wrench (2)
- * 9/16" wrench (2), * Marker
- * 3/4" wrench (2)
- * Pliers, * Scissors, * Pencils
- * Flat Head Screwdriver
- * Jig Saw or Key Hole Saw
- * Drill, * 1/4", 11/32" Drill Bit

THE FOLLOWING TOOLS WILL SPEED ASSEMBLY:

- * Ratchet with 8" extention
- * 5/16" ; 7/16" ; 1/2" ; 9/16" Sockets

TOOLS FOR SCHEDULED MAINTENANCE:

- * Torque wrench 0-45 Ft.-lbs.
- * 1/8" Allen Wrench
- * Tire Pressure Gauge
- * 1/2" Socket with 8" extension



TURN TO PAGE 28 FOR REQUIRED BREAK IN AND MAINTENANCE SCHEDULE.



Your polyVAC system engine is shipped without oil or gasoline. DO NOT attempt to start your PolyVAC engine without servicing the engine for oil First.

Parts Reference _____

Cart Parts List _____

REF. NO.	LVS-33-BH PART NO.	QTY.	LVS-33BHK PART NO.	QTY.	DESCRIPTION
1.	B-3034-10	1	B-3034-10	1	Clevis
2.	B-4599-10	1			Axle Support
3.	B-6667-10	1	B-6667-10	1	Lock Bracket
4.	B-4261	1			Axle
5.	B-4304T	2			Wheel
6.	B-6603	1			Bed, Poly
7.	B-6645-10	1	B-6645-10	1	Towbar, Rea
8.	B-6659-10	1	B-6659-10	1	Towbar, Front
9.	B-8026-10	2	B-8026-10	2	Support, Longitudinal
10.	B-4377	1	B-4377	1	Cylinder, Gas
11.	B-6668-10	1	B-6668-10	1	Handle, Bed Release
	1008259-10**	1	1008259-10**	1	Foot Pedal
12.	B-6577-10	1	B-6577-10	1	Bracket, Gas Spring
13.	20M1016P	11	20M1016P	3	Machine Screw, 5/16" x 1"
15.	2M1012P	4	2M1012P	4	Hex Bolt, 5/16" x 3/4"
16.	30M1000P	11	30M1000P	3	Hex Nut, 5/16"-18
17.	B-4378	2	B-4378	2	Stud Ball
18.	40M1000P	11	40M1000P	3	Lock Washer, Med. 5/16"
19.	2M1064P	1	2M1064P	1	Hex Bolt, 5/16" x 4"
20.	45M1111P	15	45M1111P	7	Flat Washer, 5/16"
21.	B-1675P	1	B-1675P	1	Lock Nut, 3/8"-16
22.	B-3861	1	B-3861	1	Hitch Pin, 1/2" x 2-1/2"
23.	B-4305	2	B-4305	2	Retainer Ring, 3/4" E-Type
24.	B-1674P	7	B-1674P	7	Lock Nut, 5/16" 7
25.	B-5606	4	B-5606	4	Machine Bushing, 3/4"
26.	2M1616P	1	2M1616P	1	Hex Bolt, 1/2" x 1"
27.	2M1256P	1	2M1256P	1	Hex Bolt, 3/8" x 3-1/2"
28.	B-1677P	1	B-1677P	1	Hex Nut, 1/2"
29.	B-6300	1	B-6300	1	Latch Spring
31.	D-146P	1	D-146P	1	Hairpin Cotter, 1/8"
32.	B-6492-C	1	B-6492-C	1	Decal, Caution
60.	B-7255-10	1	B-7255-10	1	Support Plate

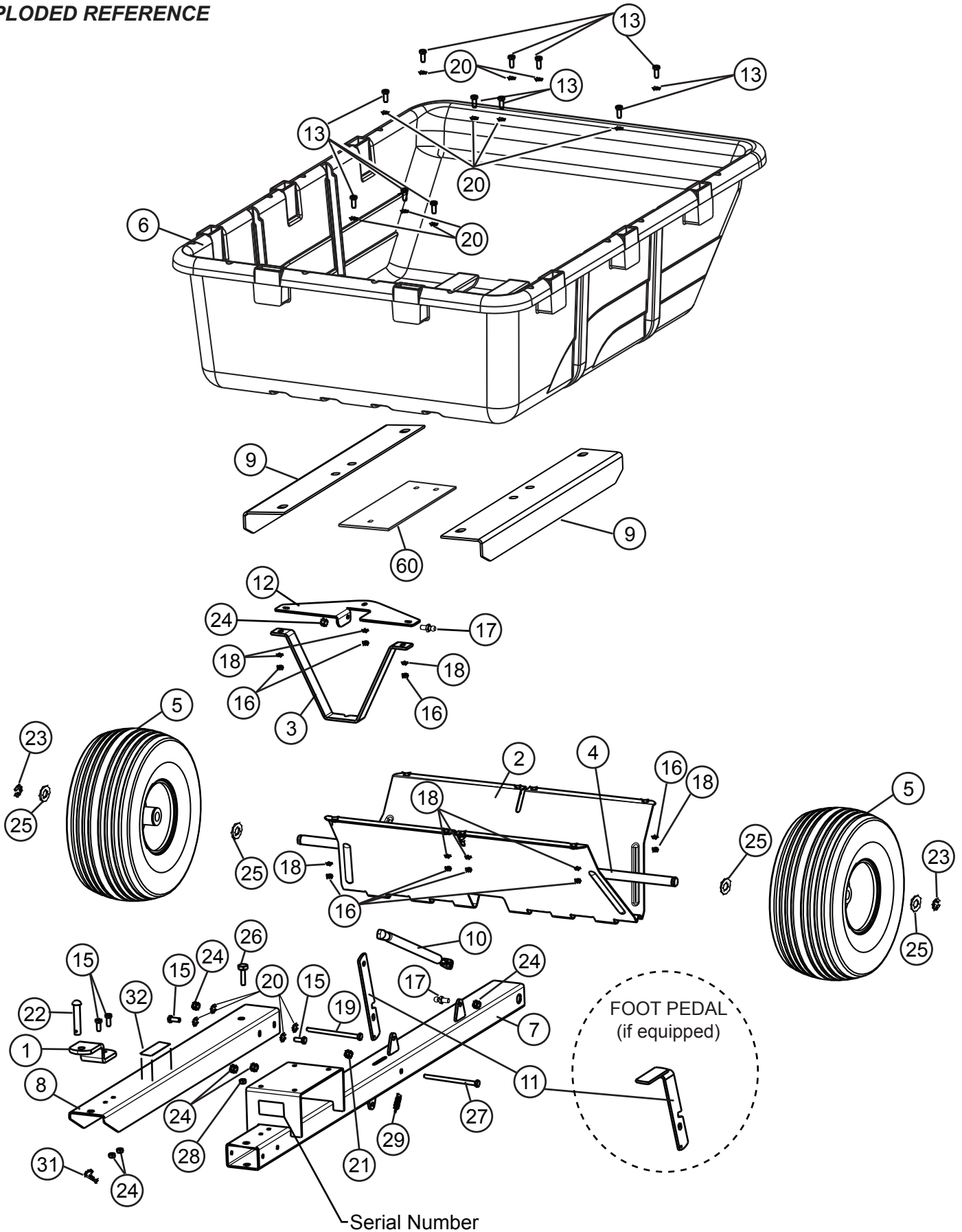
** - if equipped

To Order Parts Call:
877-728-8224

Visit us on the web:
www.brinly.com



EXPLODED REFERENCE



Parts Reference _____

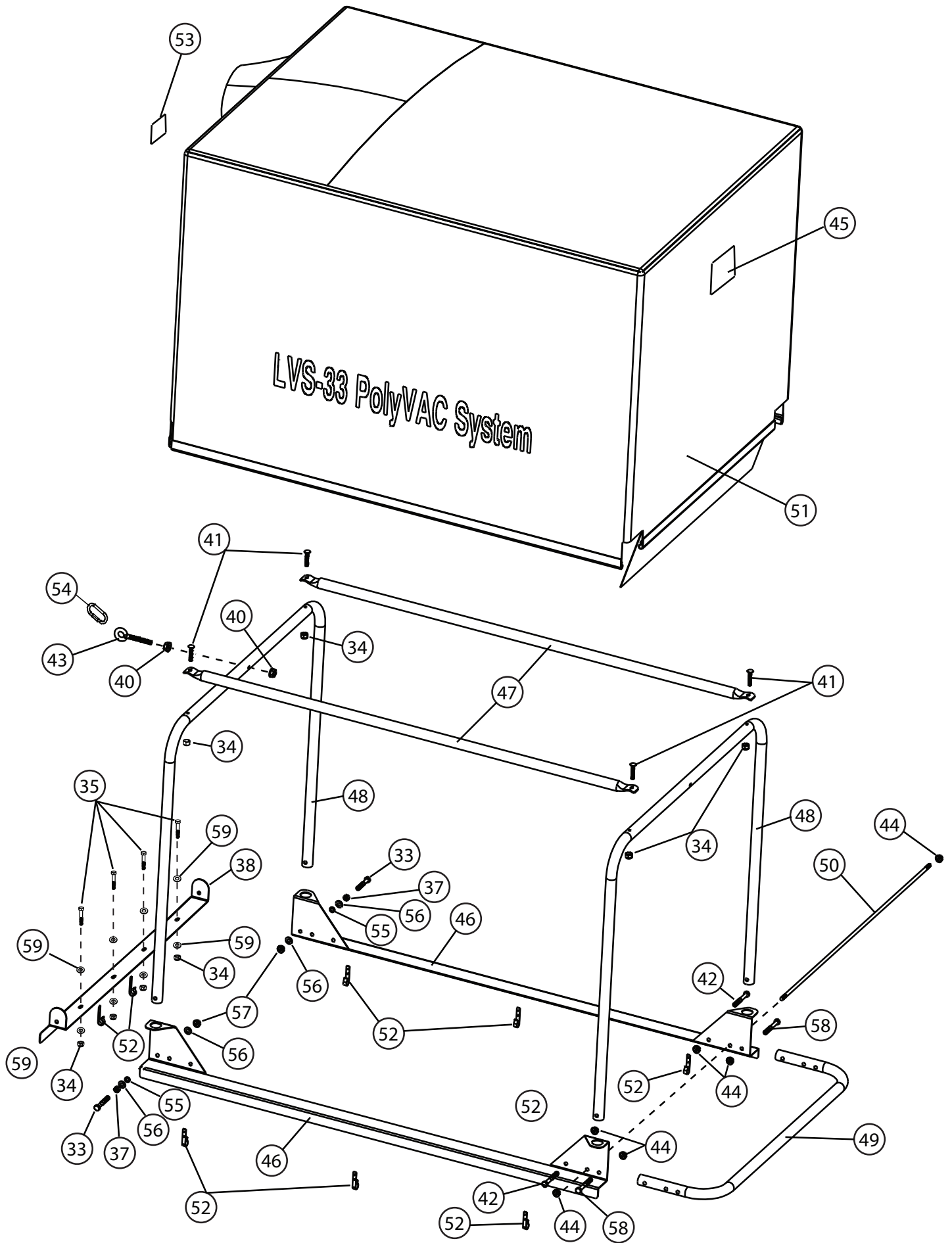
Canopy Parts List _____

To Order Parts Call:
877-728-8224

Visit us on the web:
www.brinly.com

REF. NO.	PART NO.	DESCRIPTION	QTY.
33	2M1032P	Hex Bolt, 5/16" x 2"	2
34	B-4785	1/4" Nylon Lock Nut	4
35	2M0824P	1/4" x 1-1/2", Hex Head Bolt	4
36	L-1771	Instructions	1
37	30M1000P	5/16", Hex Nut	2
38	B-6792-10	Front Bracket	1
40	B-4355	5/16" Whiz Lock Nut	8
41	11M0824P	Carriage Bolt, 1/4" x 1-1/2"	2
42	2M1024P	Hex Bolt, 5/16" x 1-1/2"	4
43	B-6456	5/16" x 1-1/2", Eye Bolt	2
44	B-4786	Nylon Lock Nut, 5/16"	1
45	B-6492-A	Warning Label	6
46	B-6793-10	Side Bracket	1
47	B-6796-10	Top Tube	1
48	B-6794-10	End Tube	2
49	B-6798-10	Handle	2
50	B-6799	Rod, Threaded	1
51	B-6800	Canopy	1
52	B-6903-01	Clip, Canopy Retainer	1
53	B-6492-B	Warning Label	8
54	B-4666	Quick Link	1
55	B-6921	Spacer, 1/8"	1
56	45M1111P	5/16", Flat Washer	2
57	B-1674P	5/16", Lock Nut	4
58	2M1040P	5/16" x 2-1/2", Hex Bolt	2
59	45M0909P	1/4" Flat Washer	8





Parts Reference _____

Engine Parts List _____

REF. NO.	PART NO.	DESCRIPTION	QTY.
67	11M0812P	1/4" x 3/4", Carriage Bolt	10
68	11M0816P	1/4" x 1", Carriage Bolt	1
69	2M1024P	5/16" x 1-1/2", Hex Head Bolt	4
70	30M0800P	1/4" Hex Nut	1
71	45M0909P	1/4" Flat Washer	13
72	45M1111P	5/16" Flat Washer	4
73	B-4785	1/4" Nylon Lock Nut	13
74	B-4786	5/16" Nylon Lock Nut	4
75	B-6890-15	Impeller Assembly	1
76	B-6367-10	Blower Housing Plate	1
78	B-7113	Engine	1
79	B-6469	5/16" x 3/4" Hex Fl. Screw	4
80	1008391	Blower Housing Assembly	1
81	B-6492-D	Warning Label	1
82	B-6478-10	Upper Chute Bracket	1
83	1007295-10	Blower Band, Painted	1
84	B-7129	3/8-24" x 1-1/4", Hex Fl. Screw	1
85	B-6697	Spring Washer	1
86	B-6467	Upper Chute	1
87	B-6492-G, E	Warning Label	1
88	B-6476-01	Hose Support Rod	1
90	B-6457	Cable Assembly	1
91	10M0828P	1/4" x 1-3/4" Carriage Bolt	3
92	B-7131-01	3/8" Thick-Washer	1

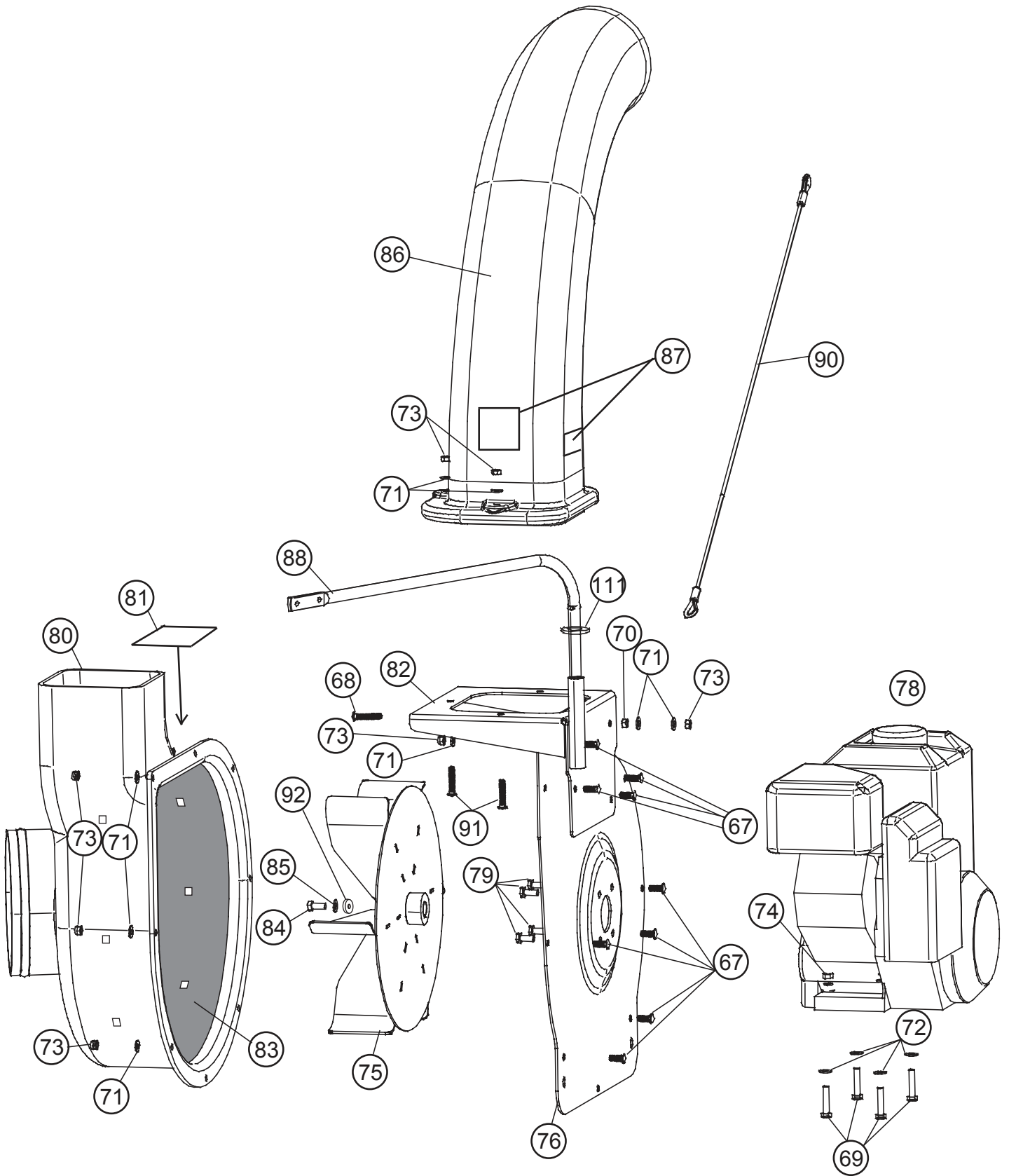
To Order Parts Call:
877-728-8224

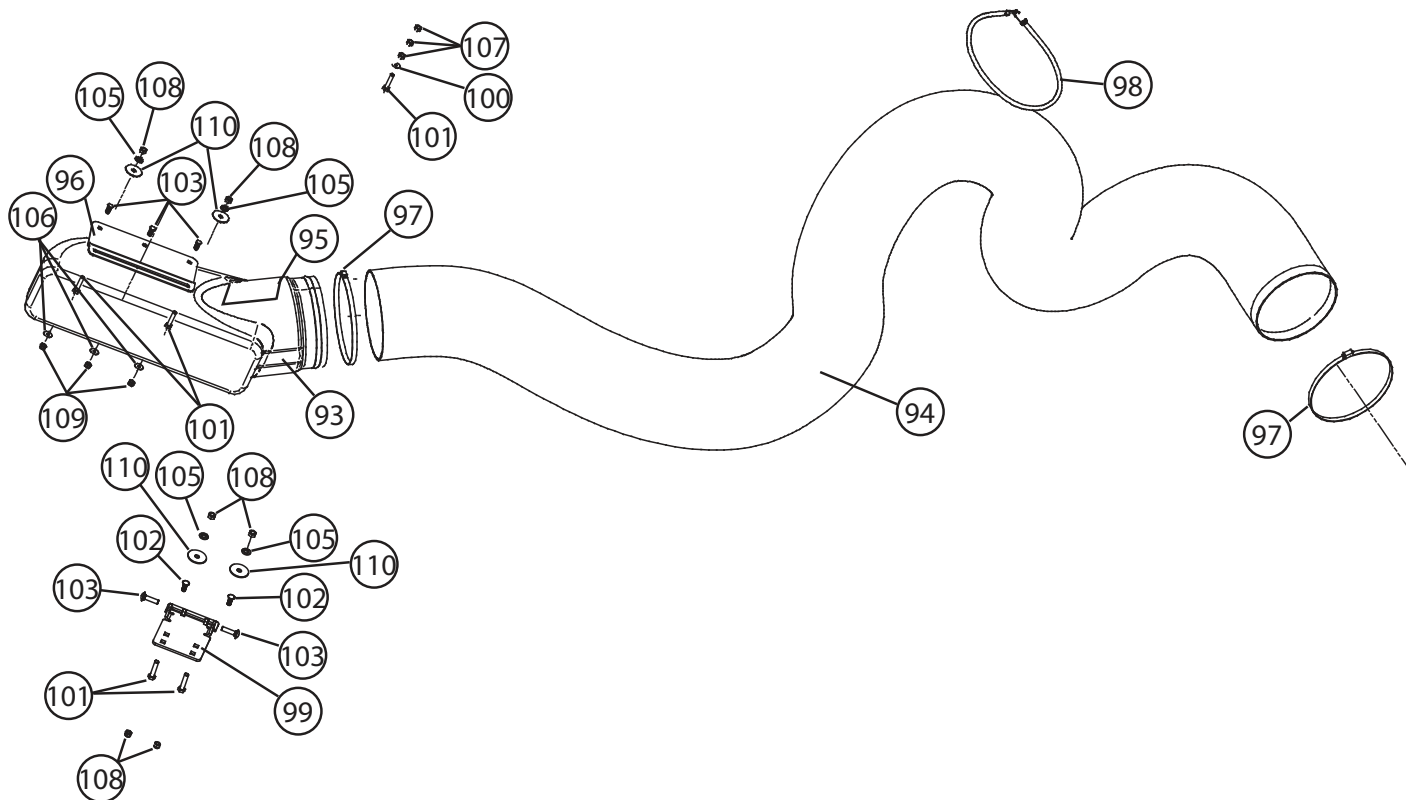
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INSTALLATION QUESTIONS?
MISSING PARTS?
REPLACEMENT PARTS?

DON'T GO BACK TO THE STORE!

Please call our Customer Service Department Toll-Free at **877.728.8224** or **customerservice@brinly.com**





Parts Reference _____

Hose Parts List _____

REF. NO.	PART NO.	DESCRIPTION	QTY.
93	B-6463	Mower Deck Housing	1
94	B-6465	Hose	1
95	B-6492-F	Warning Label	1
96	B-6464-10	Mower Deck Bracket (Large)	1
97	B-6479	Hose Clamp 8"	2
98	B-6480	Bunji Cord 36"	1
99	B-6504	Mower Deck Bracket (Small)	1
101	10M1040P	5/16" x 2-1/2", Carriage Bolt	2
102	11M0816P	1/4" x 1" Carriage Bolt	2
103	11M1016P	5/16" x 1", Carriage Bolt	5
104	2M1016P	5/16" x 1", Hex Bolt	3
105	45M0909P	1/4" Flat Washer	6
106	45M1111P	5/16" Flat Washer	3
107	B-4355	5/16" Whiz Lock Nut	6
108	B-4785	1/4" Nylon Lock Nut	2
109	B-4786	5/16" Nylon Lock Nut	6
110	R-618	Special Washer	6
111	45M2121P	5/8" Flat Washer	1

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INSTALLATION QUESTIONS?

MISSING PARTS?

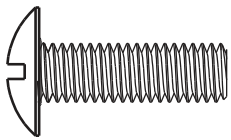
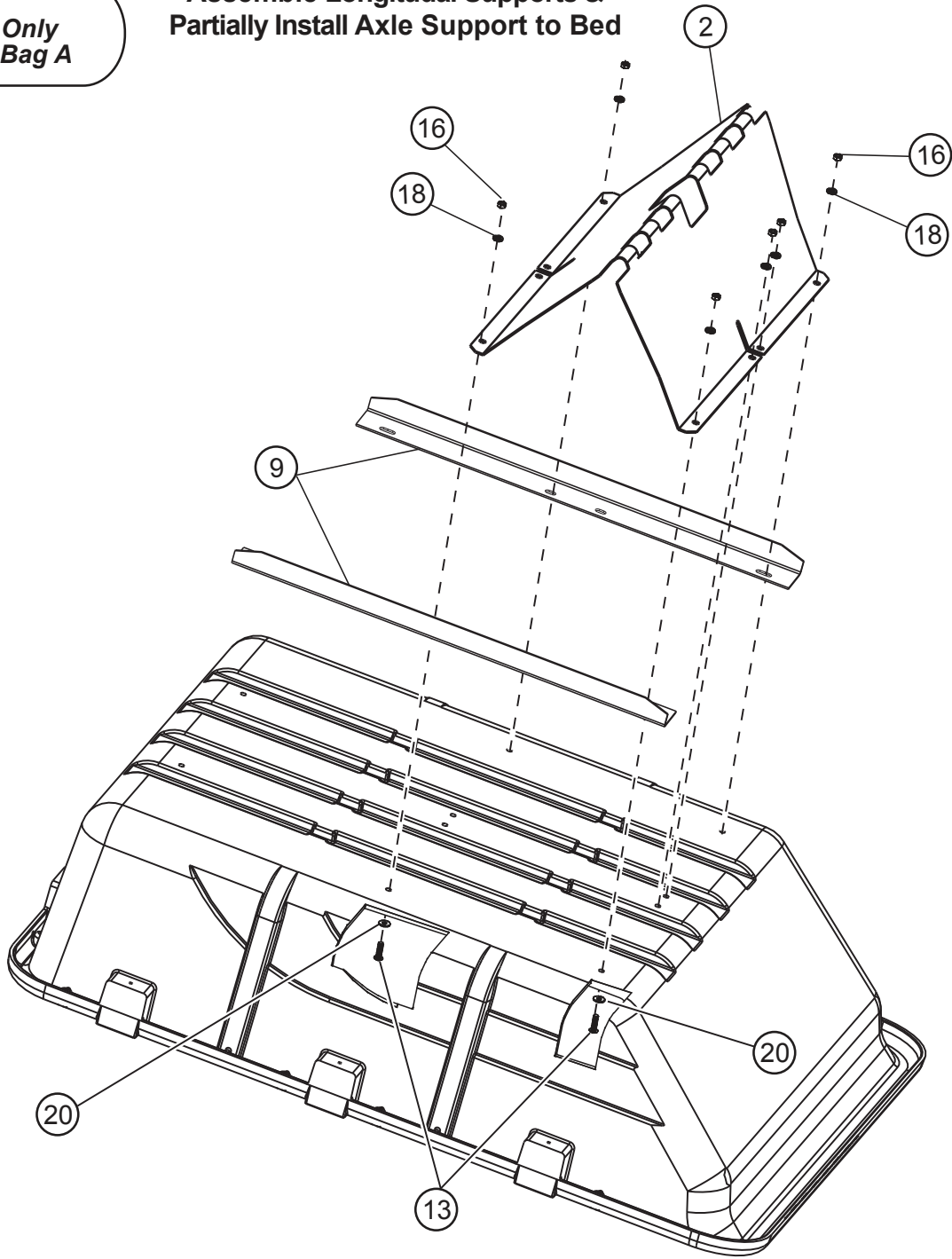
REPLACEMENT PARTS?

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TO THE STORE!

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Department Toll-Free at
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or
customerservice
@brinly.com

Step 1.
Model BH Only
Hardware Bag A

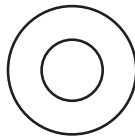
**Assemble Longitudinal Supports &
 Partially Install Axle Support to Bed**



13
 5/16" x 1", Mach. Screw
 Qty. 6



18
 5/16" Lock Washer
 Qty. 6



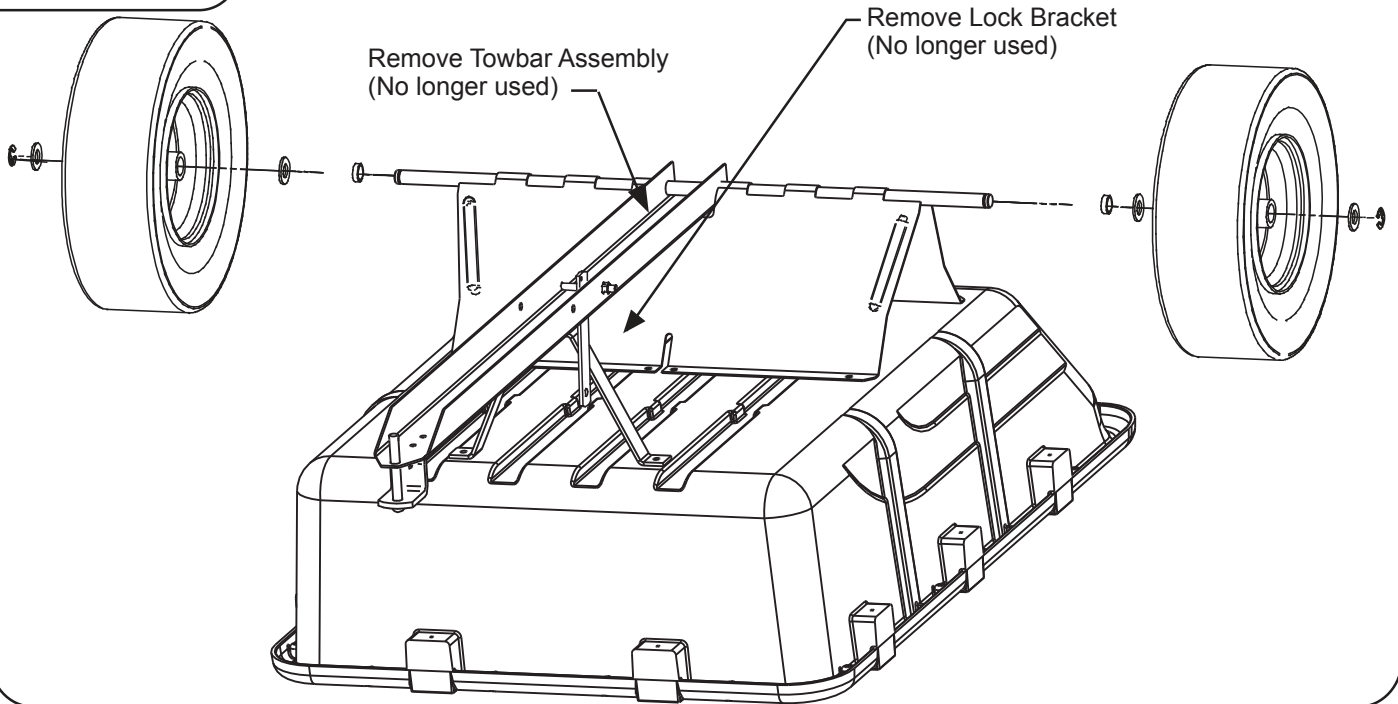
20
 5/16" Flat Washer
 Qty. 6



16
 5/16" Hex Nut
 Qty. 6

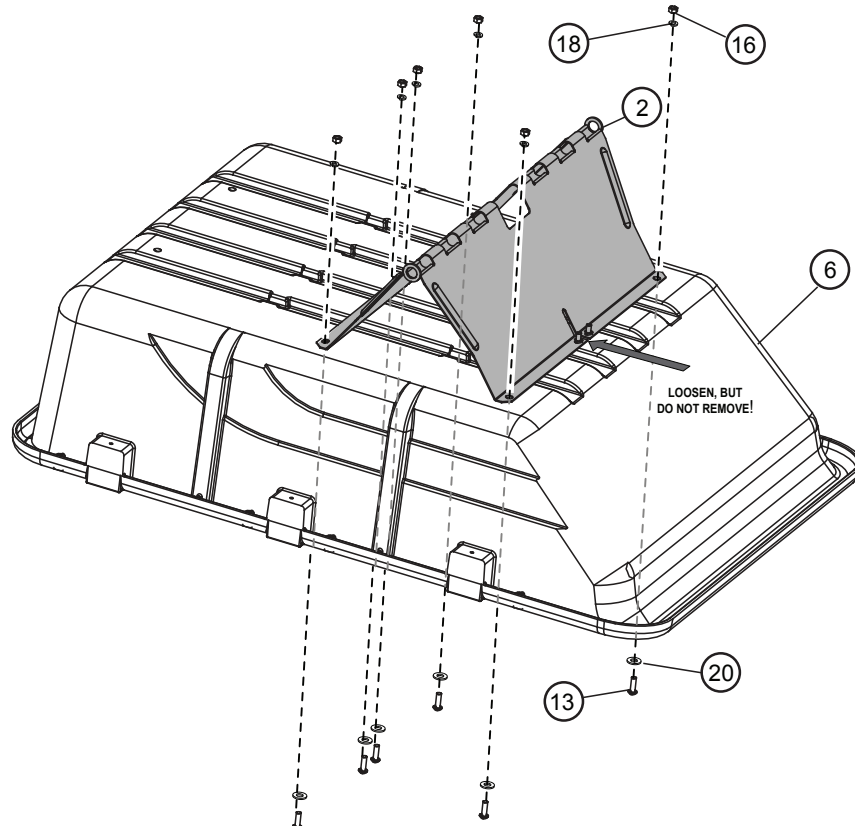
Remove Wheels and Axle

Step 2.
Model BHK Only



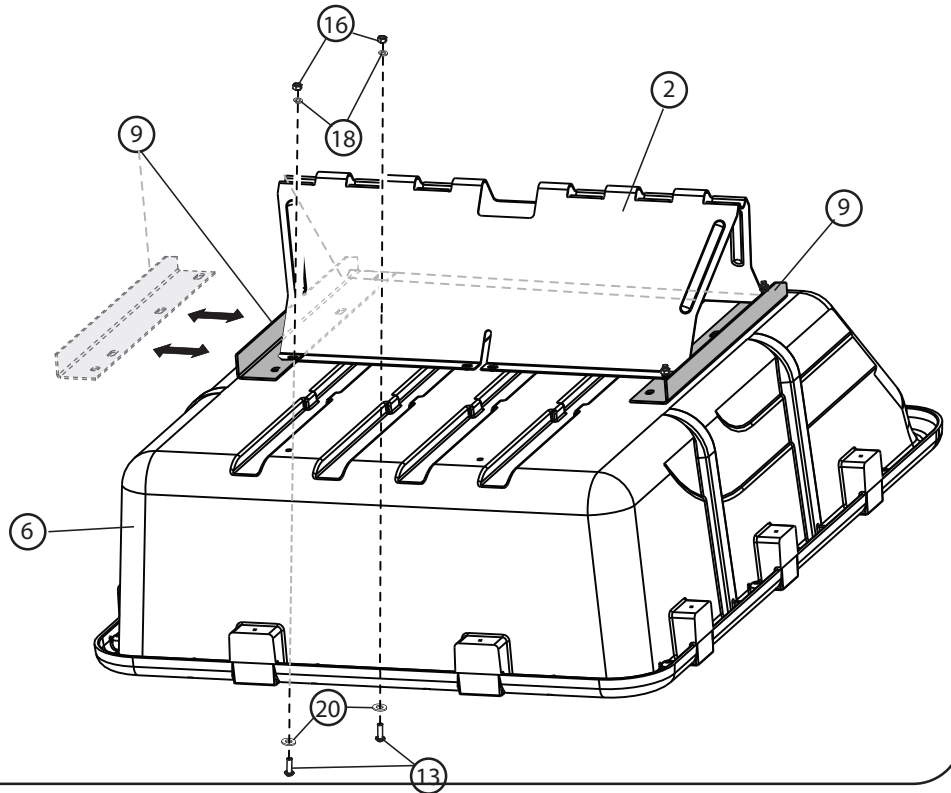
Remove Axle Support Machine Screws from Bed

Step 3.
Model BHK Only



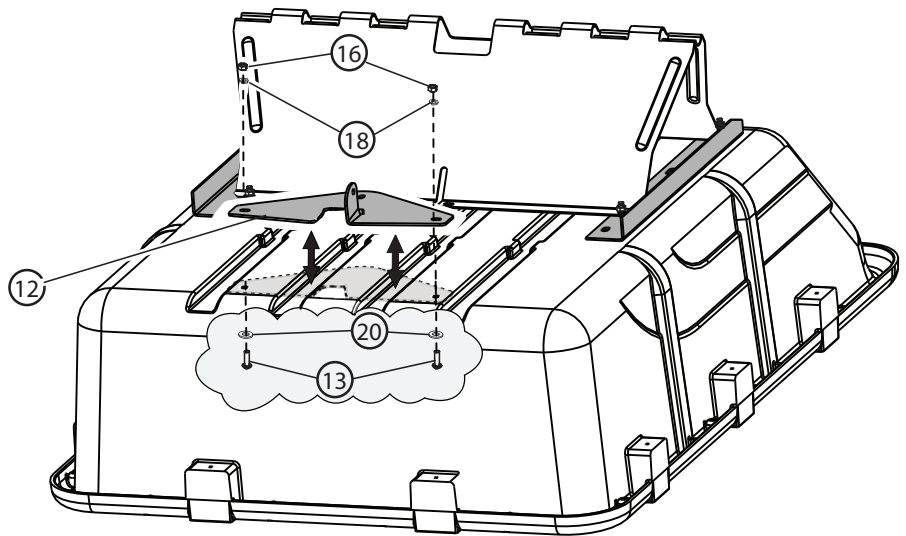
Step 4a.
Model BHK Only

**Install Longitudinal Supports, Support
Plate & Gas Spring Bracket**



Step 4b.
BH & BHK Models

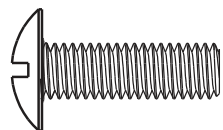
Install Spring Bracket



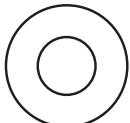
Note: The LVS-33BHK does not use the Lock Bracket and Towbar that originally came with your cart.

Assemble Support Plate, Gas Spring Bracket and Lock Bracket to Bed

Step 5. Hardware B



13
5/16" x 1", Mach. Screw
Qty. 3



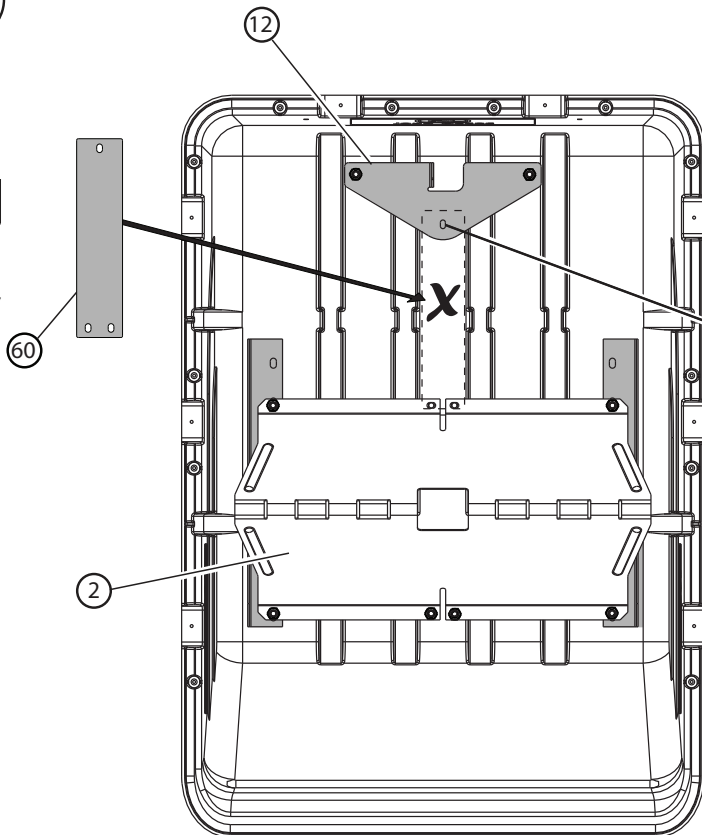
20
5/16" Flat Washer
Qty. 3



18
5/16" Lock Washer
Qty. 3

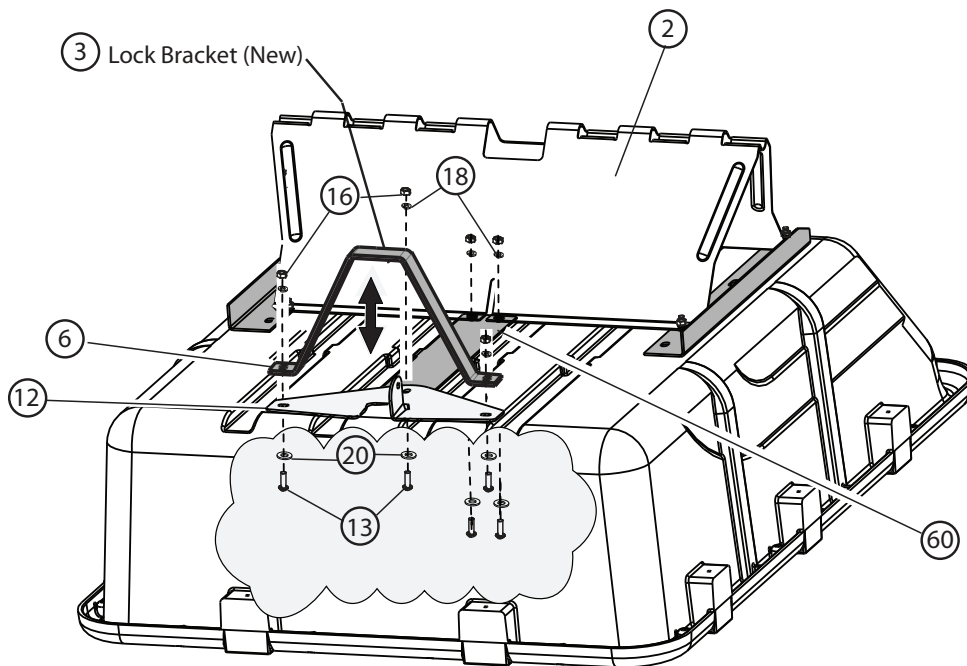


16
5/16" Hex Nut
Qty. 3



A.) Assemble gas spring bracket and new lock bracket.

B.) Using the gas spring bracket as a guide, drill 11/32" hole.

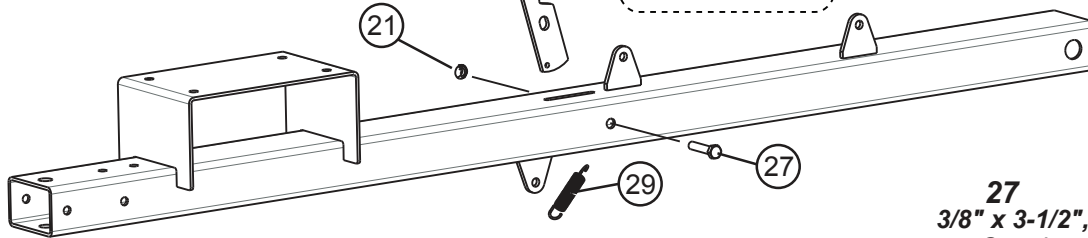
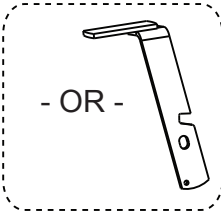
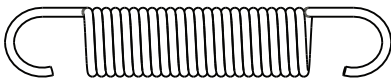


Step 6.
Hardware Bag C

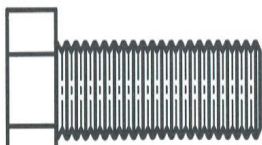
Assemble Towbar

29
Latch Spring
Qty. 1

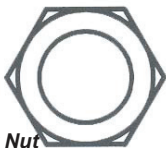
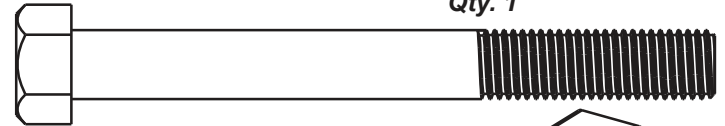
21
3/8" Hex Lock Nut
Qty. 1



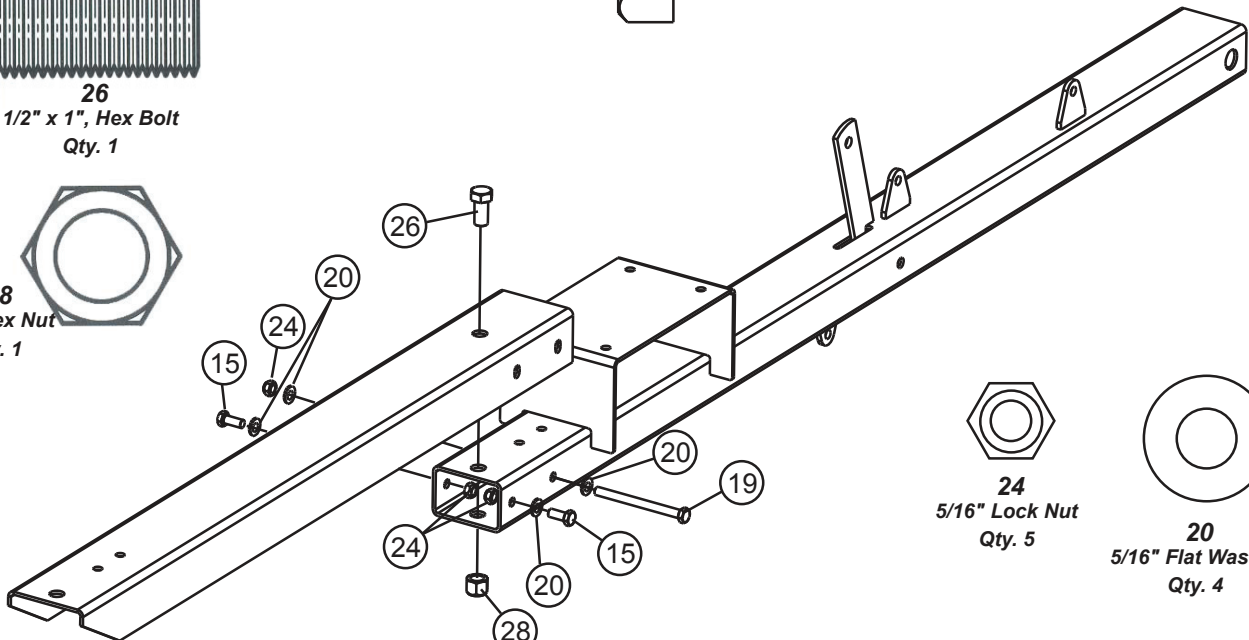
27
3/8" x 3-1/2", Hex Bolt
Qty. 1



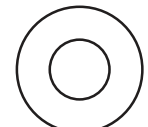
26
1/2" x 1", Hex Bolt
Qty. 1



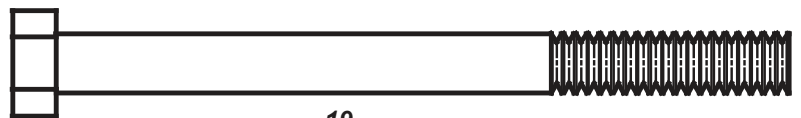
28
1/2" Hex Nut
Qty. 1



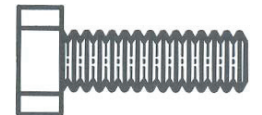
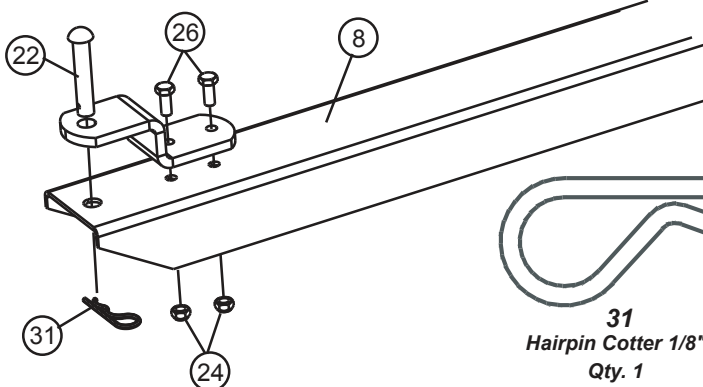
24
5/16" Lock Nut
Qty. 5



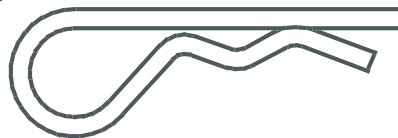
20
5/16" Flat Washer
Qty. 4



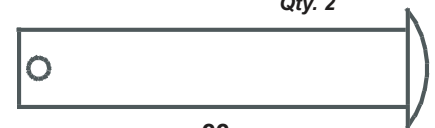
19
5/16" x 4" Hex Bolt
Qty. 1



15
5/16" x 1", Hex Bolt
Qty. 2



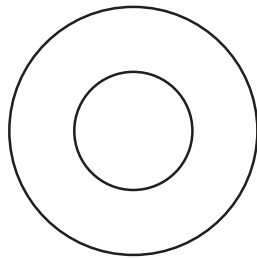
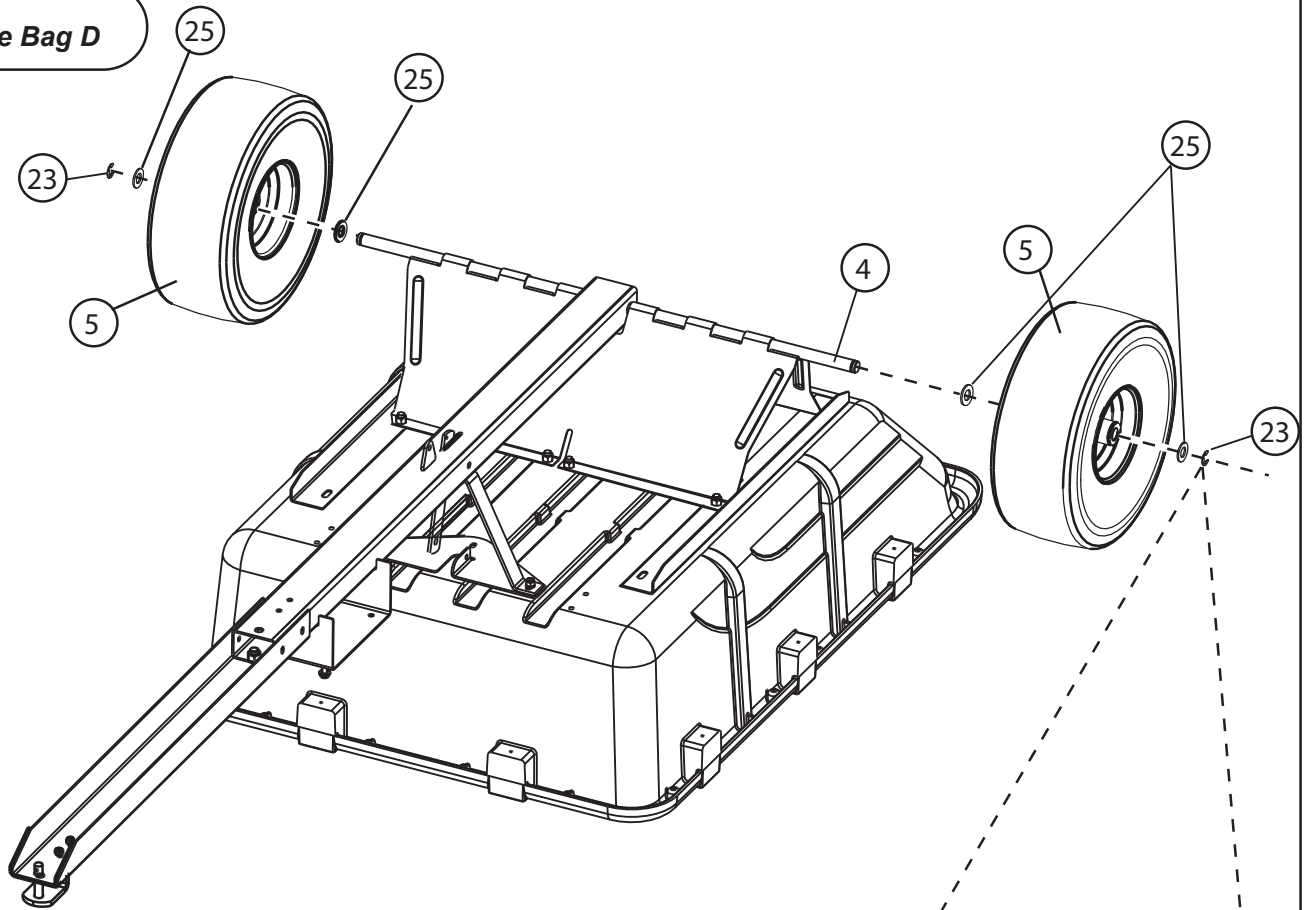
31
Hairpin Cotter 1/8"
Qty. 1



22
Hitch Pin, 1/2" x 2-1/2"
Qty. 1

Install Towbar, Axles, & Wheels

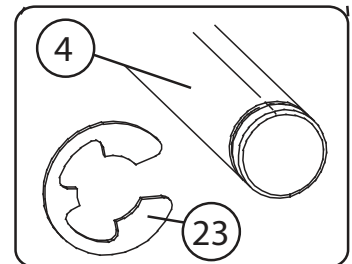
Step 7.
Hardware Bag D



25
3/4" Mach. Bushing
Qty. 4

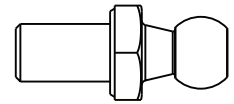
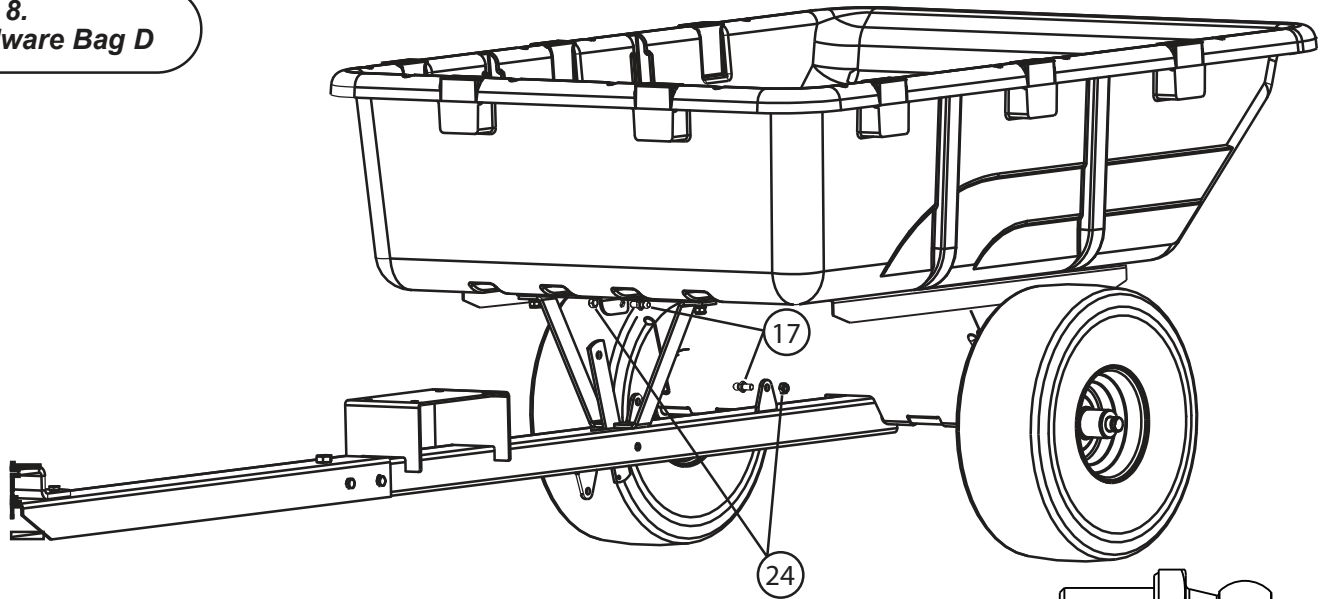


23
3/4" Retaining Ring
Qty. 2



Assemble Gas Spring

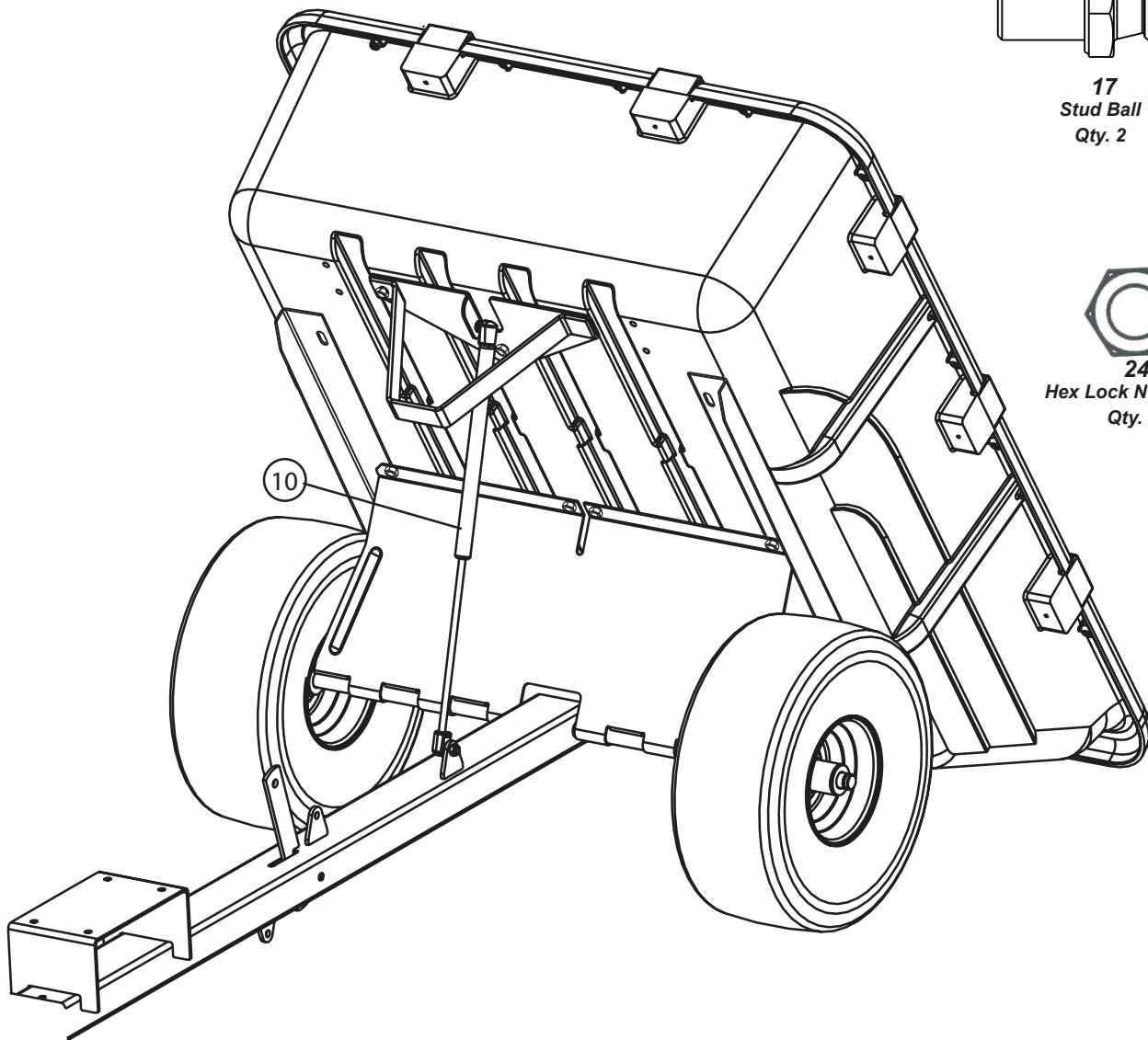
Step 8.
Hardware Bag D



17
Stud Ball
Qty. 2

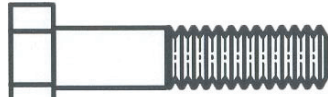


24
Hex Lock Nut, 5/16"
Qty. 2



Step 9.
Hardware Bag D

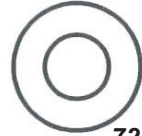
Install Engine



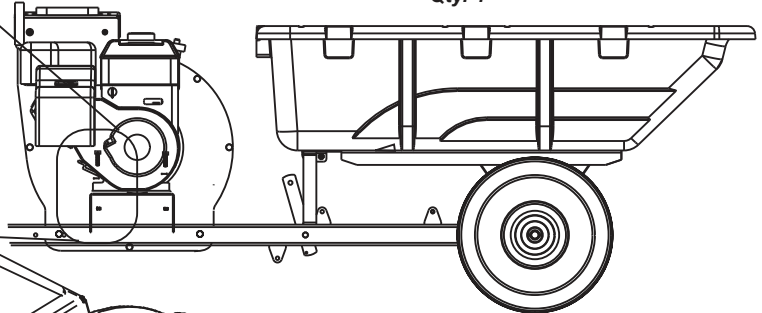
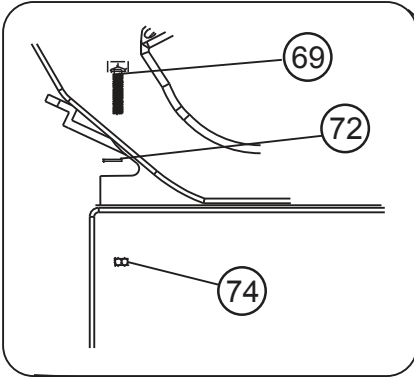
69
5/16" x 1-1/2", Hex Bolt
Qty. 4



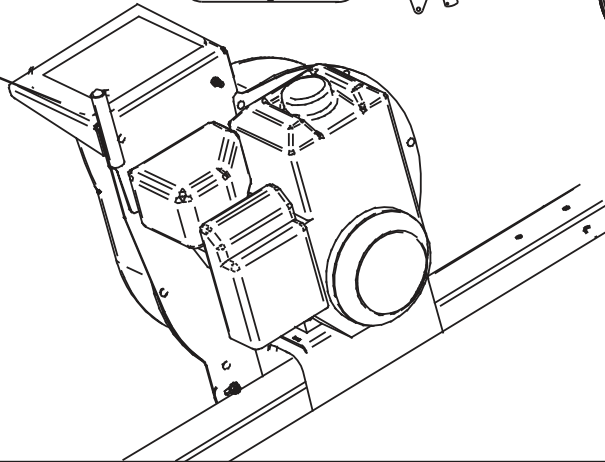
74
5/16" Nylon Lock Nut
Qty. 4



72
5/16" Flat Washer
Qty. 4

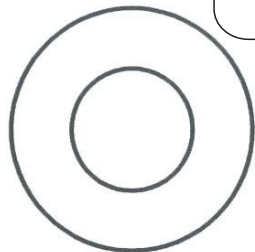
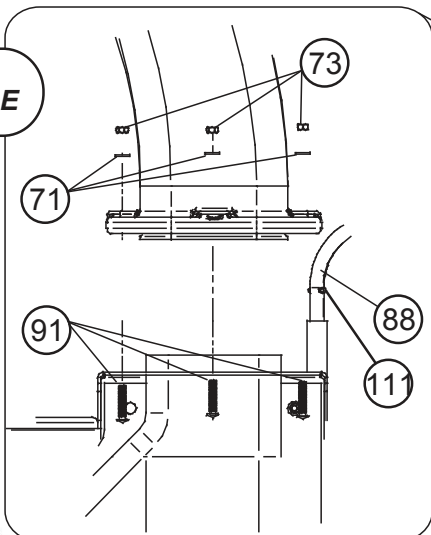


ENGINE ORIENTATION

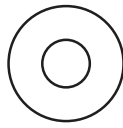


Step 10.
Hardware Bag E

Assemble Chute



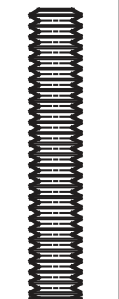
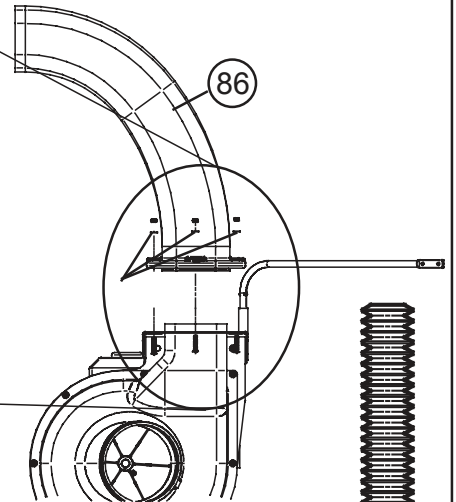
111
5/8" Flat Washer
Qty. 1



71
Flat Washer, 1/4"
Qty. 3



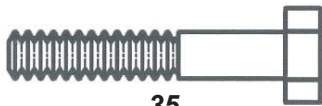
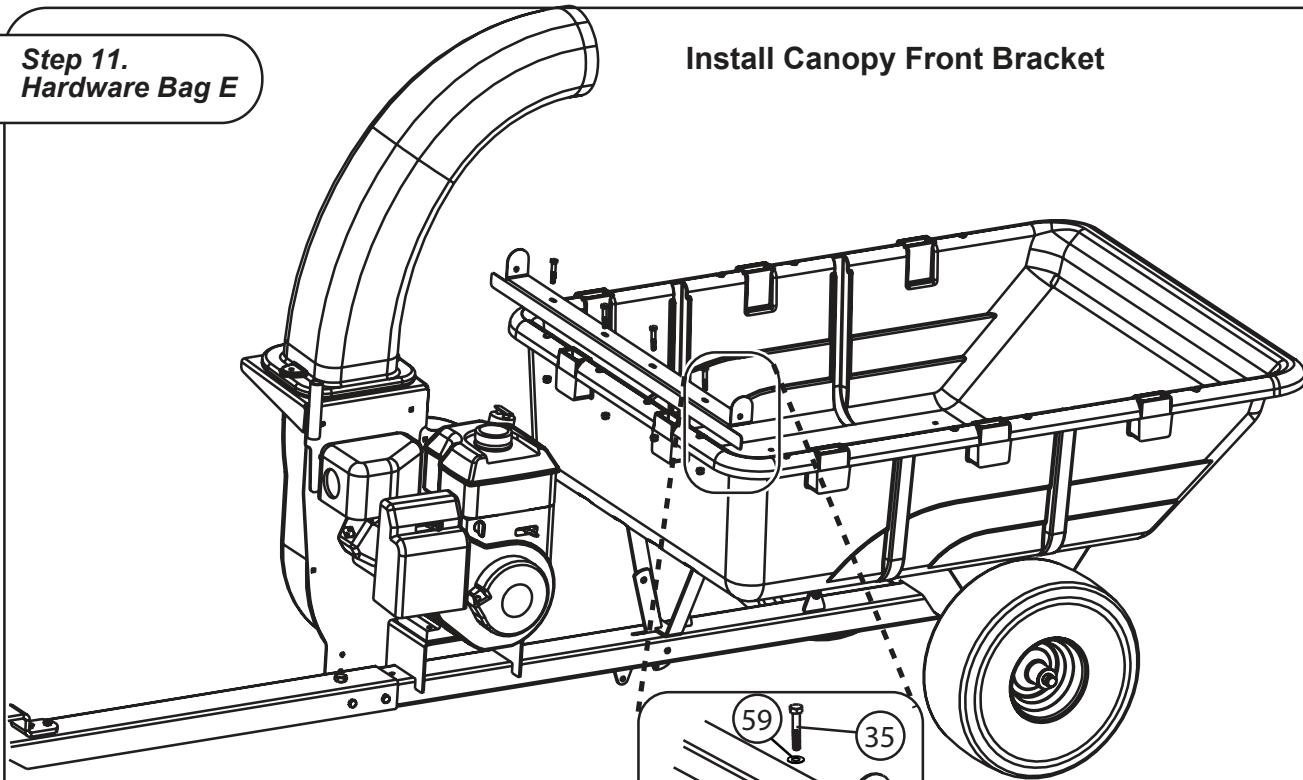
73
1/4" Nylon Lock Nut
Qty. 3



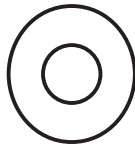
91
1/4" x 1-3/4", Carriage Bolt
Qty. 3

Step 11.
Hardware Bag E

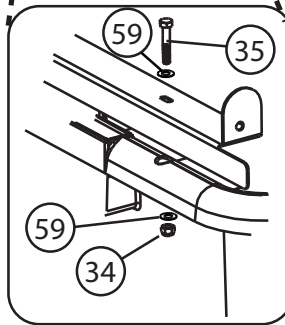
Install Canopy Front Bracket



35
1/4" x 1-1/2", Hex Bolt
Qty. 4



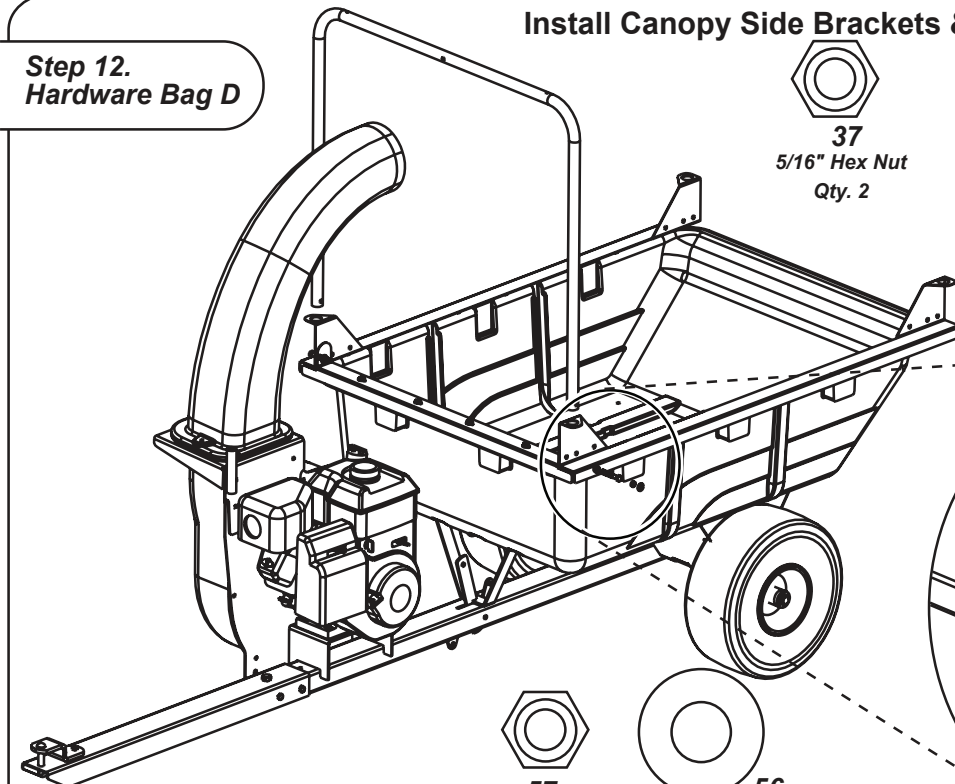
59
1/4" Flat Washer
Qty. 8



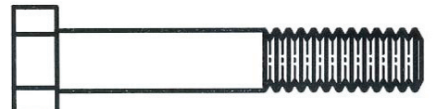
34
1/4" Nylon Lock Nut
Qty. 4

Step 12.
Hardware Bag D

Install Canopy Side Brackets & Front End Tube



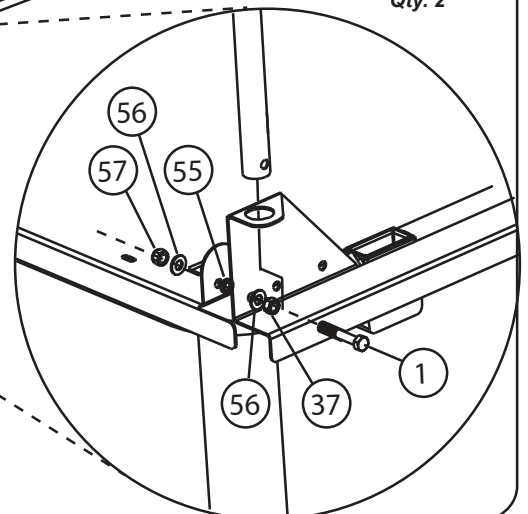
37
5/16" Hex Nut
Qty. 2



1
5/16" x 2", Hex Bolt
Qty. 2



55
Spacer, 1/8"
Qty. 2



57
5/16" Lock Nut
Qty. 2



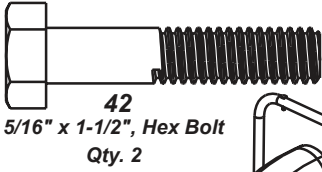
56
5/16" Flat Washer
Qty. 4

Step 13.
Hardware Bag D

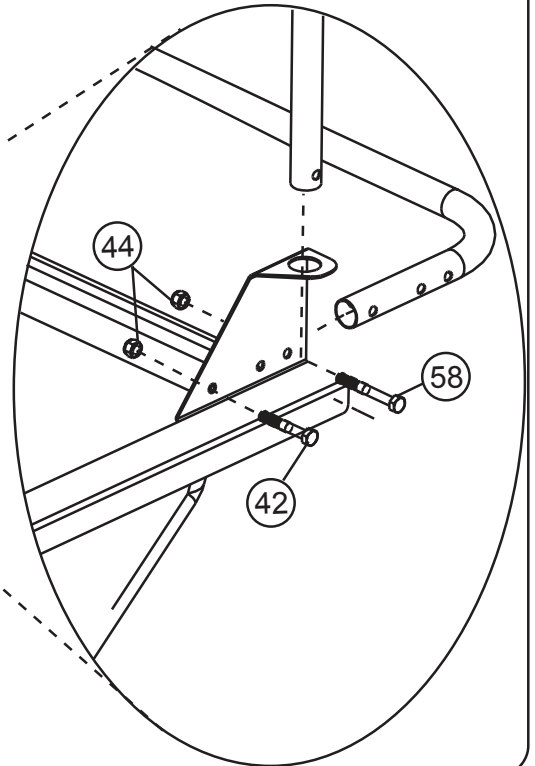


44
5/16" Lock Nut
Qty. 4

Install Rear End Tube and Handle



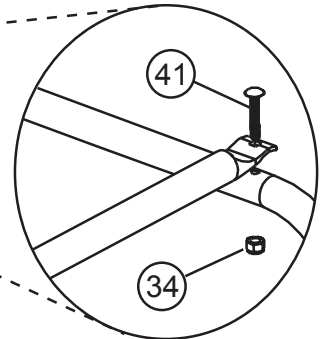
42
5/16" x 1-1/2", Hex Bolt
Qty. 2



58
5/16" x 2-1/2", Hex Bolt
Qty. 2

Step 14.
Hardware Bag E

Install Top Tubes



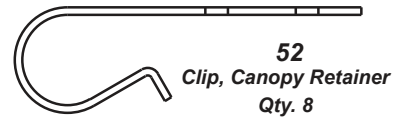
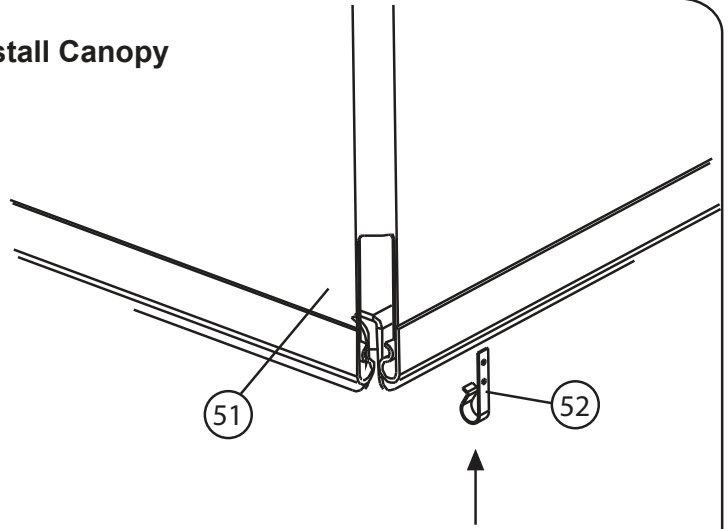
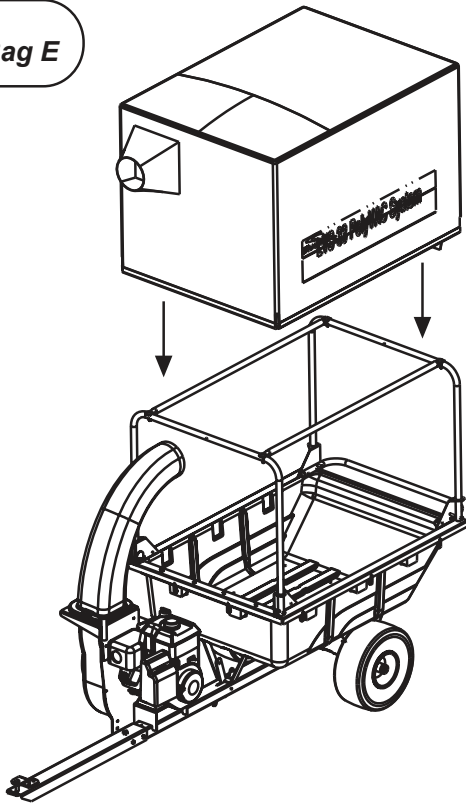
41
1/4" x 1-1/2", Carriage Bolt
Qty. 4



34
1/4" Nylon Lock Nut
Qty. 4

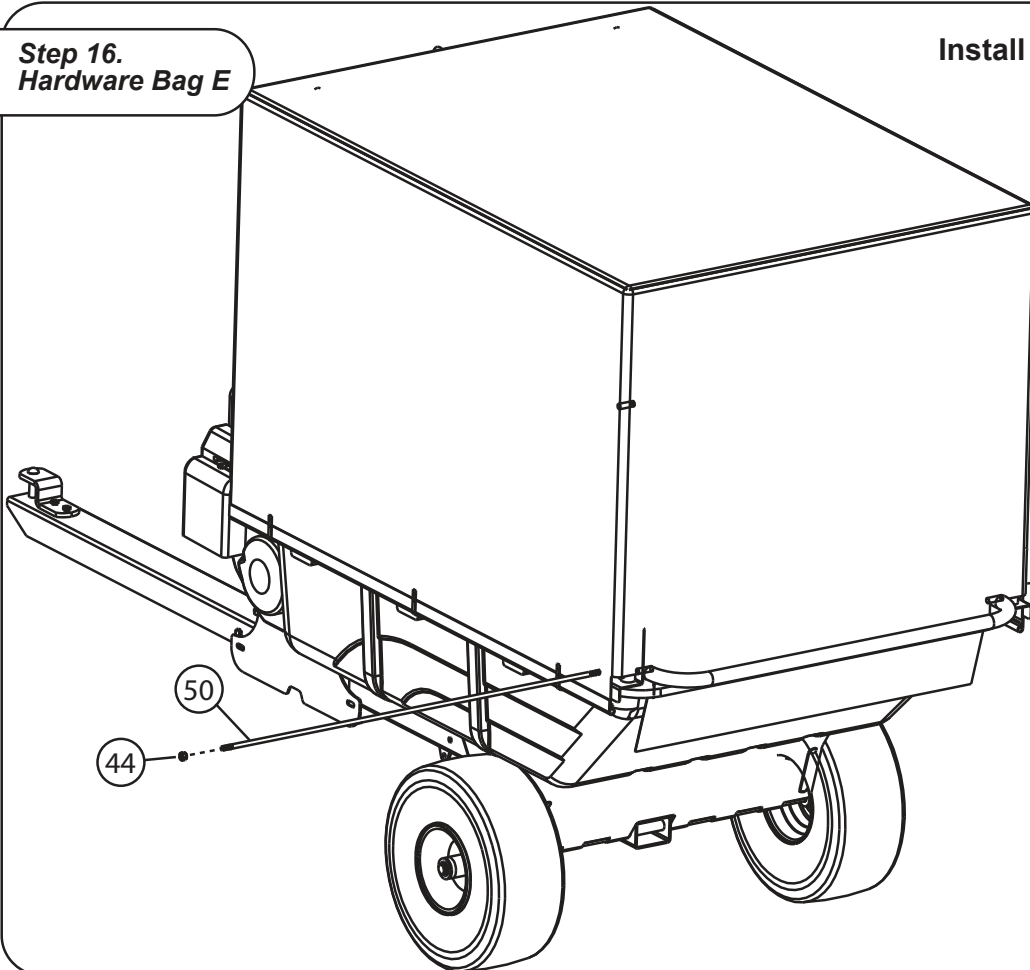
Step 15.
Hardware Bag E

Install Canopy



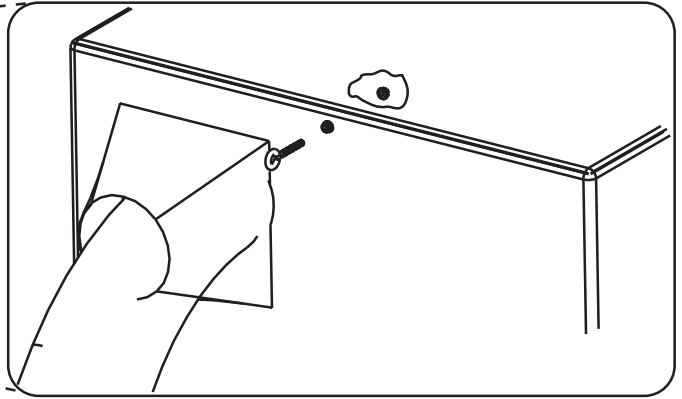
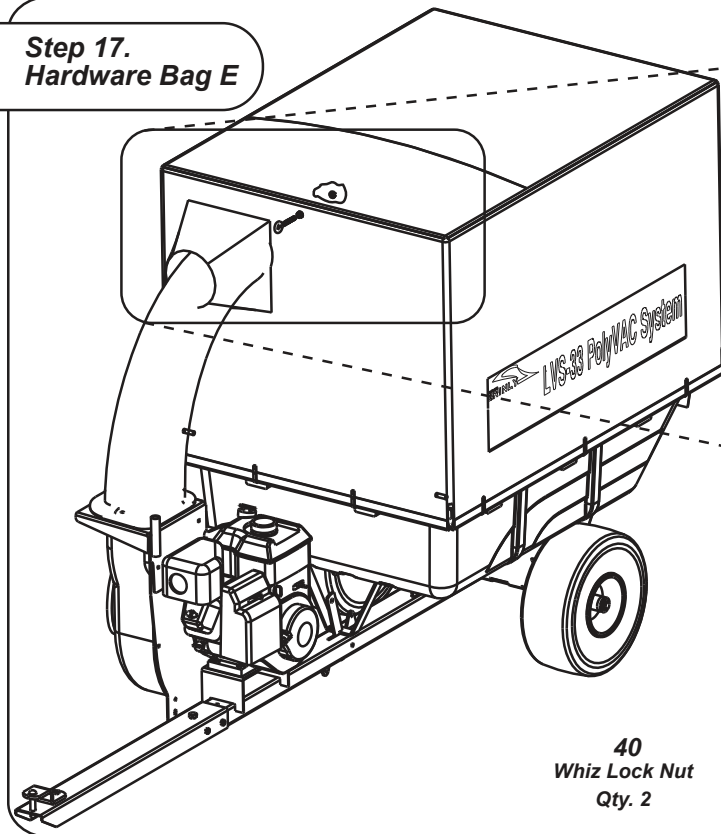
Step 16.
Hardware Bag E

Install Threaded Rod



Step 17.
Hardware Bag E

Install Eye Bolt

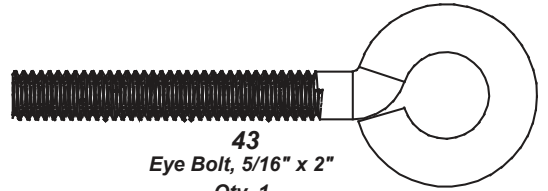


NOTE: Using a ice pick or knife make a small hole in the canopy.

40
Whiz Lock Nut
Qty. 2



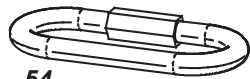
43
Eye Bolt, 5/16" x 2"
Qty. 1



Step 18.
Hardware Bag D

Install Cable Assembly

54
Quick Link 3/16"
Qty. 1
Not To Scale

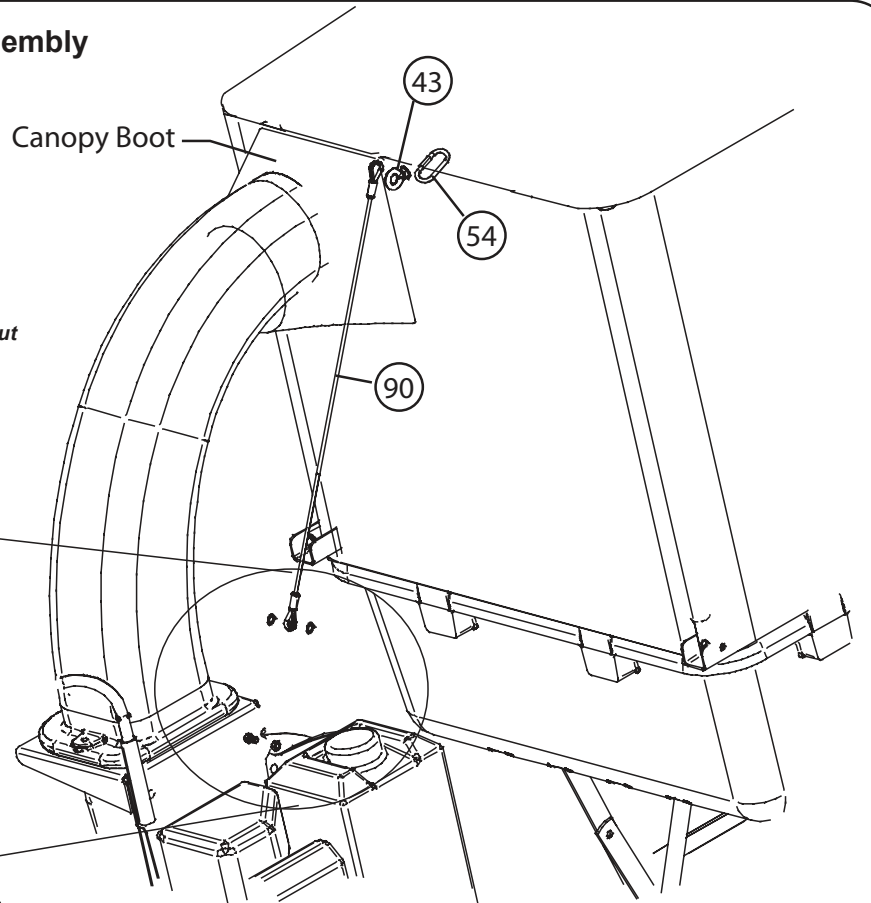


73
1/4" Nylon Lock Nut
Qty. 1

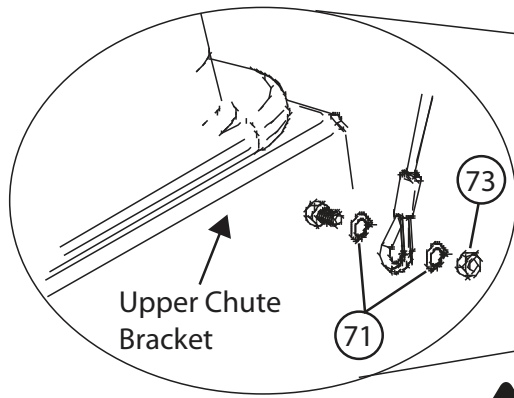


71
1/4" Flat Washer
Qty. 2

Canopy Boot



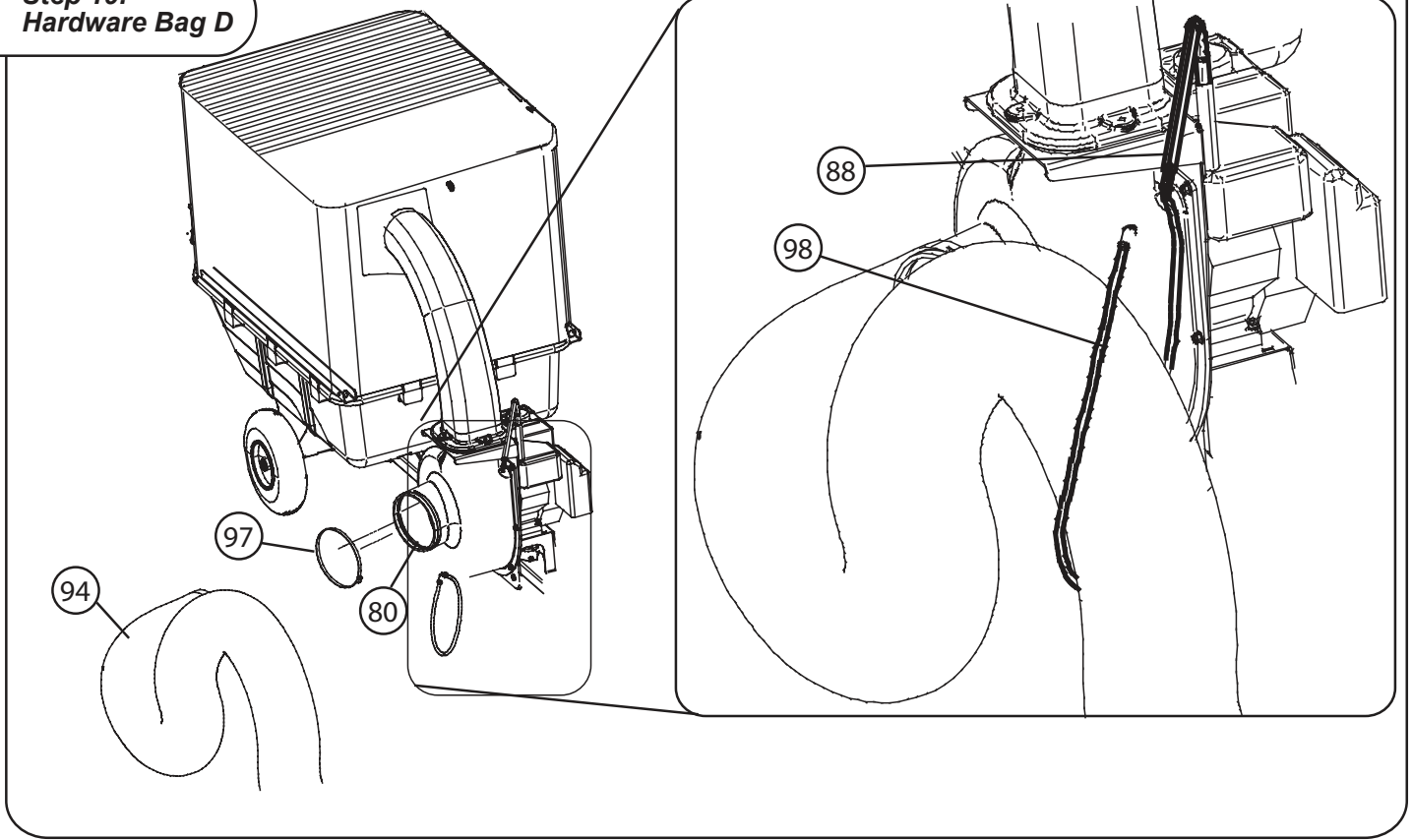
Upper Chute Bracket



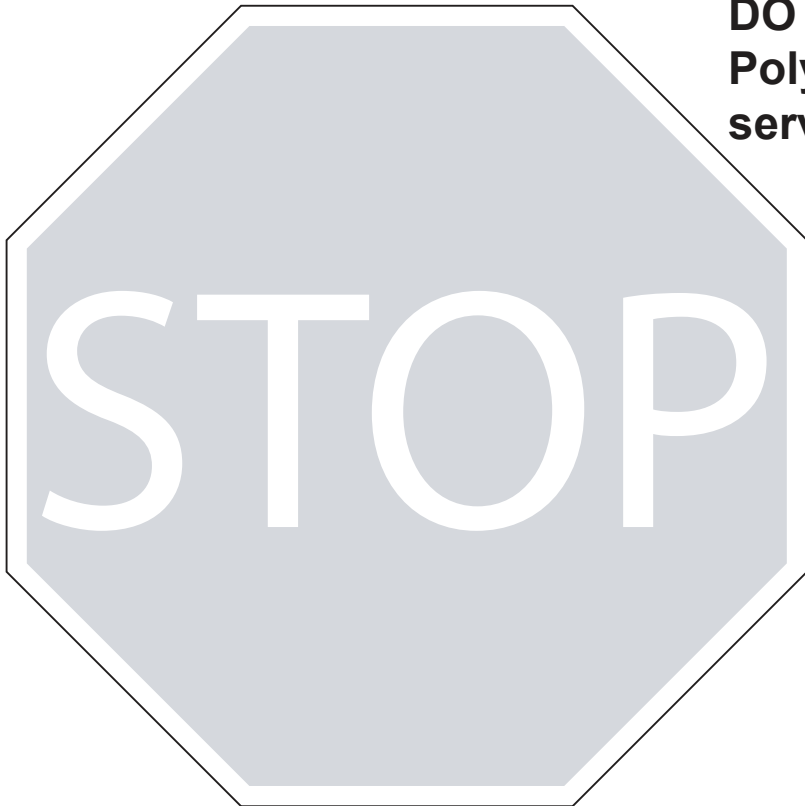
CAUTION: The Cable holds the canopy open in the carts dump position. Do Not Skip this Step!

Step 19.
Hardware Bag D

Install Hose



Your polyVAC system engine is shipped without oil or gasoline. DO NOT attempt to start your PolyVAC engine without servicing the engine for oil First.



DO NOT START ENGINE BEFORE SERVICING!

TRACTOR PREPARATION

The Mower Deck Housing does not have to be closely fitted to your mower deck, or airtight. It just needs to be installed in front of the mower deck opening where the grass exits using existing holes in mower deck whenever possible. Templates have been provided to give you a starting point and guide for completing this step. Depending upon the manufacturer of your tractor and the year, variations may occur. The guides can be used to help you get started. It is recommended that you remove material a little at a time to obtain the best fit.

42. Select and cut out template according to Tractor Model and Mower Deck cutting width. **NOTE:** Templates are for specific Tractor Models. If yours is not included, proceed to "Tractor Preparation" (49) and choose Option 1 (Step 22) or 2 (Step 22) that best fits your Tractor Mower Deck and mount the Mower Deck Bracket. Next, position Mower Deck Housing under the Bracket as shown in Option 3 or 4. Trace around Mower Deck opening using a marker pen. Cut out using a jig saw or key hole saw.

43. Position and tape template over Mower Deck Housing using two pencils for alignment as shown on templates and Step 20.

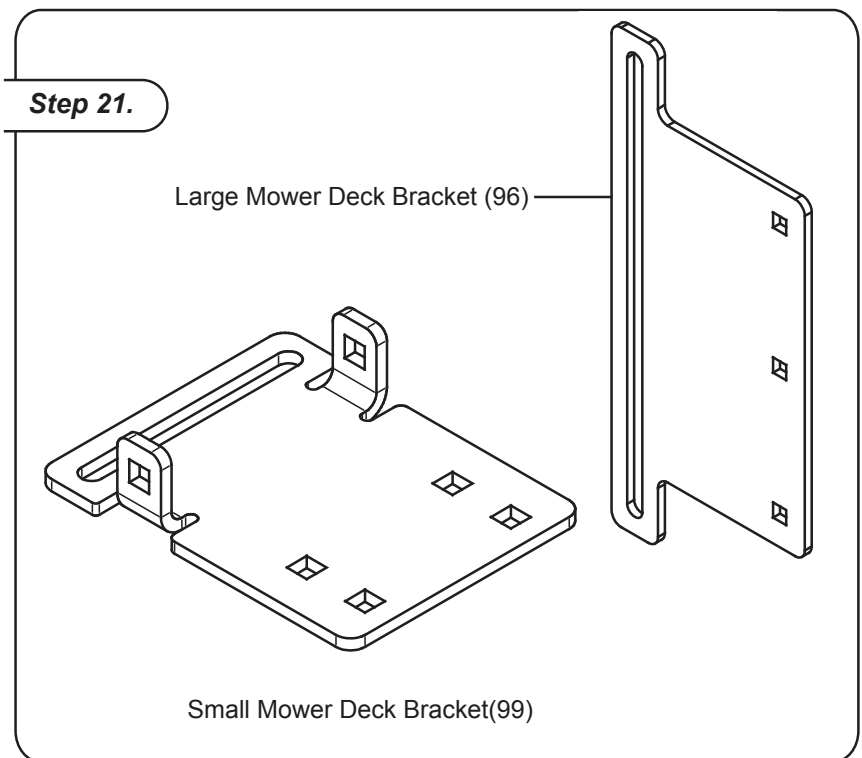
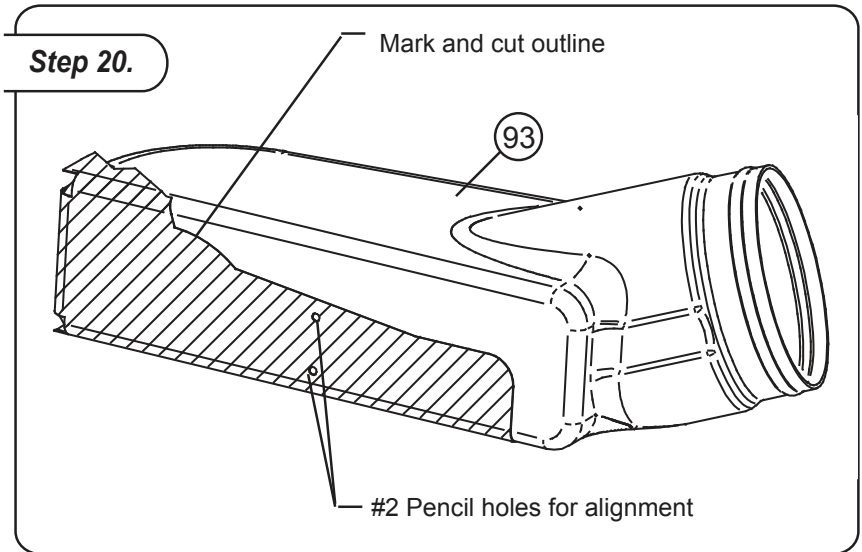
44. Mark outline of template onto Mower Deck Housing using a marker.

45. Cut Mower Deck Housing outline previously marked using a jigsaw or key hole saw.

46. Remove Grass Deflector from Mower Deck. **NOTE:** Keep Grass Deflector and reinstall whenever your Lawn-Vac is not in use.

47. Determine the type of Mower Deck Bracket (96 or 99) based on Tractor Model and Mower Deck width. Refer to Step 21 and to Chart for recommended Options.

48. Position previously cut opening in Mower Deck Housing to opening of Mower Deck, aligning bottom of Mower Deck Housing to bottom of Mower Deck.



TRACTOR PREPARATION

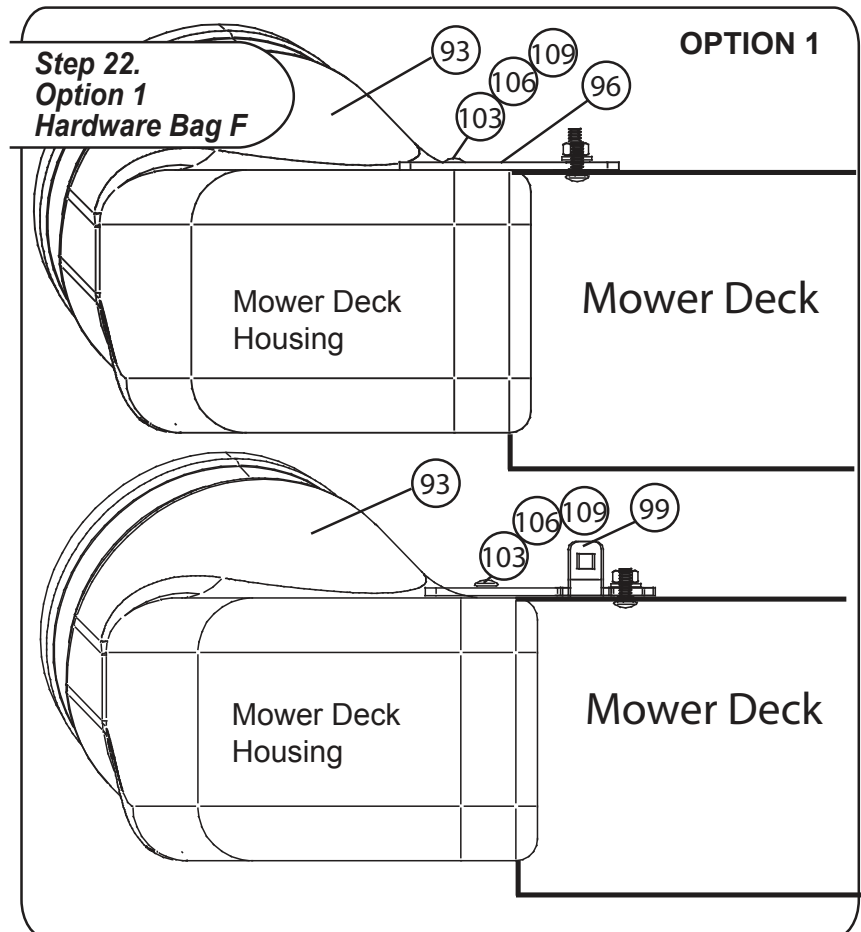
49. Measure the height of the Mower Deck opening on your tractor. If the mower deck opening is 5-3/4" or less use options 1, 2, or 3 to mount the Mower Deck Housing. If the Mower Deck opening is greater than 5-3/4" use option 4.

Option 1. The top of the Mower Deck Housing is flush with the top of the Mower Deck. Install Large or Small Mower Deck Bracket using 1/4" x 1" or 5/16" x 1" Bolt (to match hole size in your Mower Deck) with Flat Washer and Lock Nuts.

Align cut out Mower Deck Housing to discharge opening in Mower Deck (under previously installed Mower Deck Bracket) and mark the three or two holes depending on Mower deck Bracket type (Large, Small)

Drill 5/16" holes in the Mower Deck Housing.

Assemble Mower Deck Housing and to the Mower Deck Bracket using 5/16" x 1" Carriage Bolts (103), Flat Washers (106) and Lock Nuts (109).

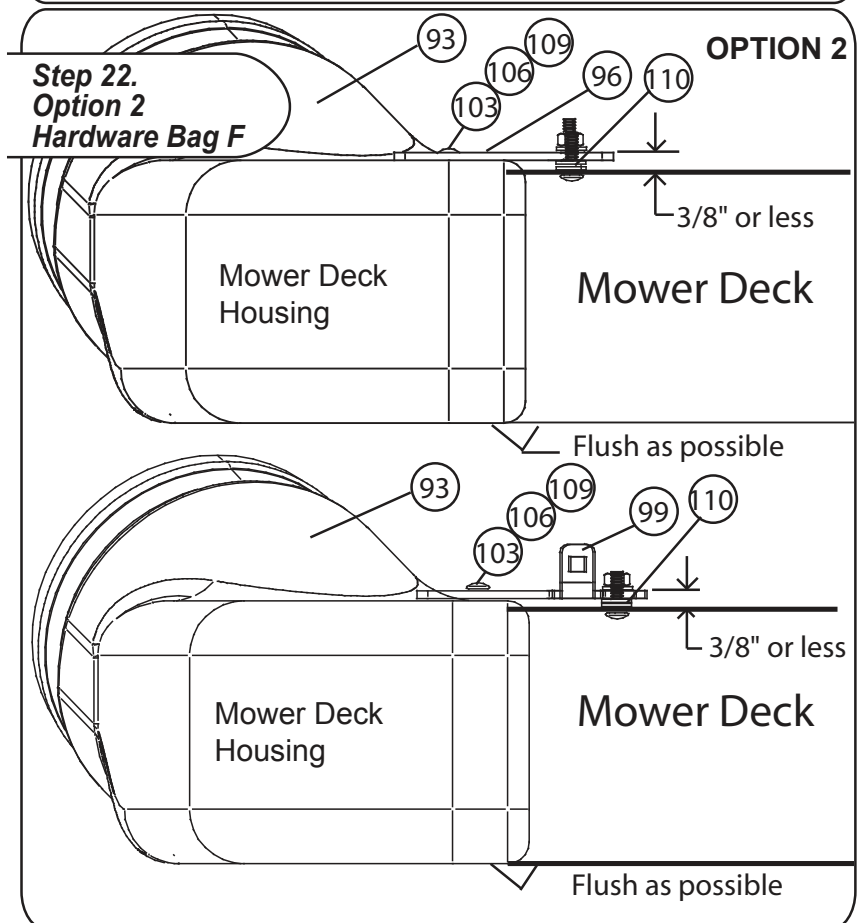


Option 2. The top of the Mower Deck Housing is 3/8" or less above the mower deck. Install Large or Small (Ears Up) Mower Deck Bracket using 1/4" x 1" or 5/16" x 1" Carriage Bolt (to match holes in your Mower Deck) with Flat Washer and Lock Nuts. Use one to three Flat Washers (110) to space Mower Deck Bracket above Mower Deck Housing.

Align cut out Mower Deck Housing to discharge opening in Mower Deck (under previously installed Mower Deck Bracket) and mark the three or two holes depending on Mower deck Bracket type (Large, Small)

Drill 5/16" holes in the Mower Deck Housing.

Assemble Mower Deck Housing to the Mower Deck Bracket using 5/16" x 1" Carriage Bolts (103), Flat Washers (106) and Lock Nuts (109).



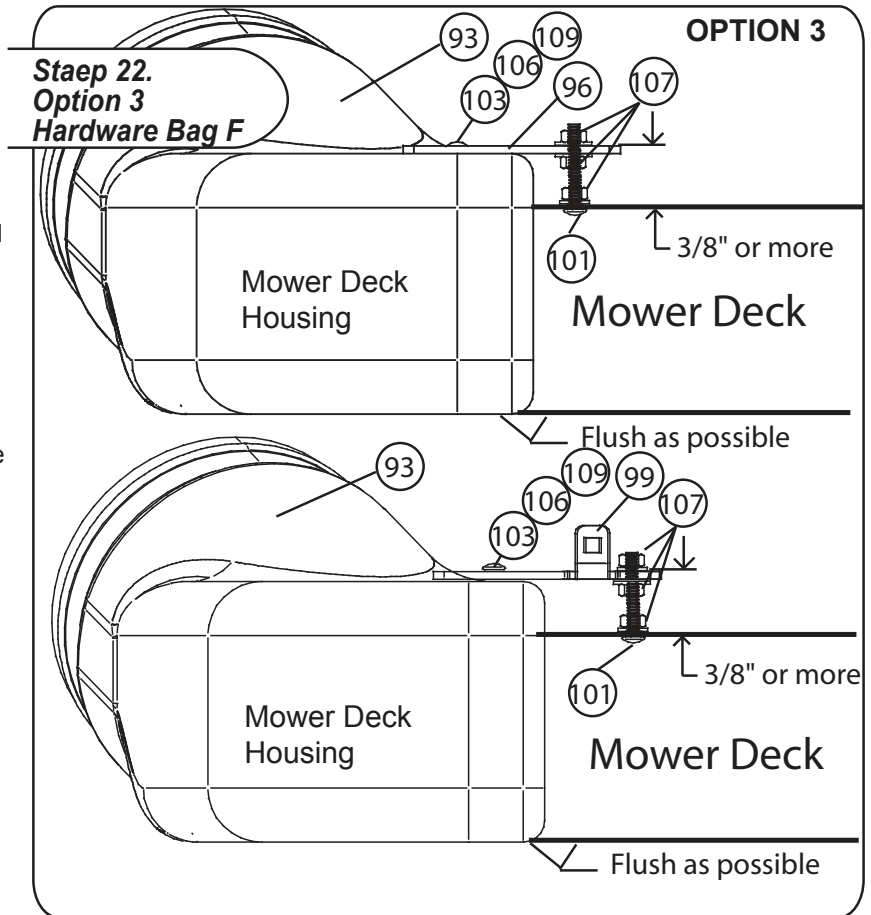
TRACTOR PREPARATION

Option 3. The top of the Mower Deck Housing is 3/8" or more above the mower deck. Install Large or Small Mower Deck Bracket using Carriage Bolt (101) (from inside Mower Deck) and Flange Nut (107). Tighten securely. Thread a second Flange Nut (107) (with Flange Up) onto Carriage Bolts. Adjust those Flange Nuts so they are flush with top of Mower Deck Bracket over Flange Nuts Securing with two more Flange Nuts (Flange Down). Tightn Securely.

Align cut out Mower Deck Housing to discharge opening in Mower Deck (under previously installed Mower Deck Bracket) and mark the three or two holes depending on Mower deck Bracket type (Large, Small)

Drill 5/16" holes in the Mower Deck Housing.

Assemble Mower Deck Housing and to the Mower Deck Bracket using 5/16" x 1" Carriage Bolts (103), Flat Washers (106) and Lock Nuts (109).

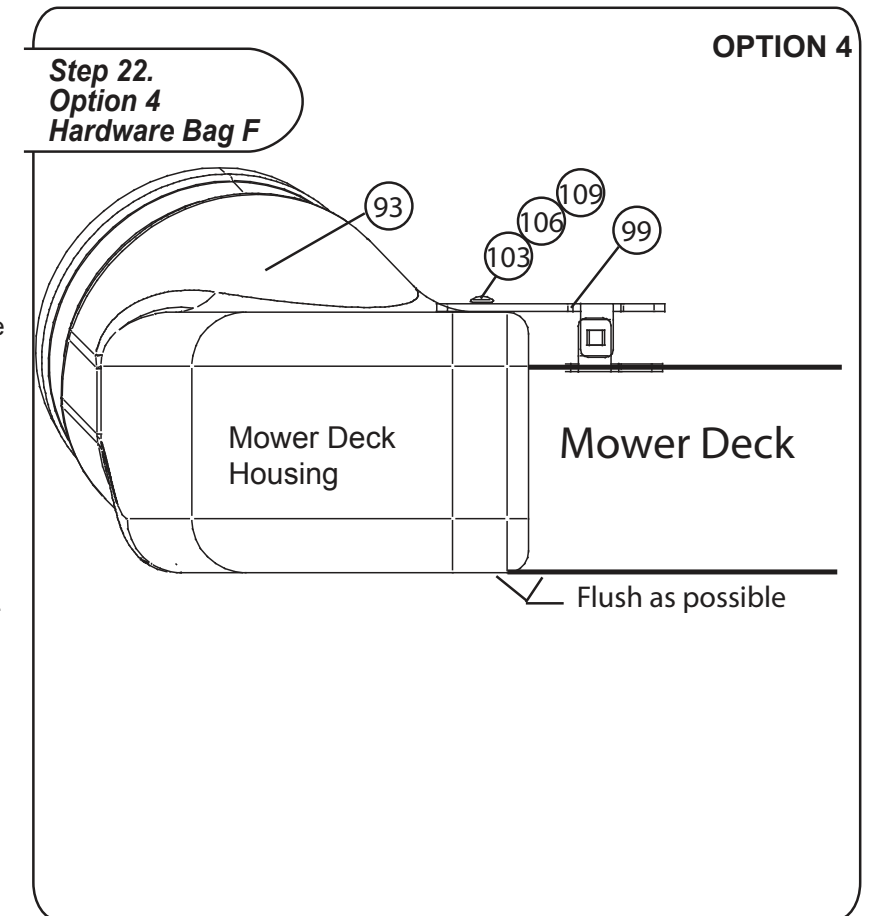


Option 4. The top of the mower deck has a mounting bracket for the grass deflector. The Small Mower Deck Bracket (with ears down) can be mounted to grass deflector bracket on Mower Deck using 5/16" x 1" Carriage Bolts (103) and Lock Nuts (109).

Align cut out Mower Deck Housing to discharge opening in Mower Deck (under previously installed Mower Deck Bracket) and mark the three or two holes depending on Mower deck Bracket type (Large, Small)

Drill 5/16" holes in the Mower Deck Housing.

Assemble Mower Deck Housing to the Mower Deck Bracket using 5/16" x 1" Carriage Bolts (103), Flat Washers (106) and Lock Nuts (109).



50. The final step is to install Hose to Mower Deck Housing that was previously assembled.

OPERATION

GENERAL:

Avoid over filling the unit, it can cause the tractor to lose traction and skid, as well as cause the blower to clog. Extremely heavy loads will be difficult to dump. Fill to a capacity that is comfortable for you to dump. When backing up, carefully back STRAIGHT to avoid "jack-knifing", which can cause damage to your equipment.

BEFORE STARTING:

⚠ CAUTION: Your lawn-vac system engine is shipped without oil or gasoline. DO NOT attempt to start your Lawn-vac engine without servicing the engine for oil First.

- 1) Service the engine with oil and gasoline as instructed in the separate engine manual.
- 2) Inspect the lawn-vac system to make sure the mower deck adapter, hose, and upper chute are properly attached.
- 3) Check that the lower flap at the rear of the canopy is lying to the inside of the cart bed.
- 4) Check the tires for proper inflation. This should be 30 psi.

⚠ WARNING: NEVER fill the fuel tank indoors, with the engine running, or while the engine is hot. Do not smoke while filling the fuel tank.

HOW TO START YOUR LAWN-VAC UNIT:

⚠ WARNING: NEVER start or run the engine without the hose and upper shoot being properly attached to the blower housing and canopy.

- 1) Check that the engine has the proper level of oil and gasoline.
- 2) Attach the spark plug wire to the spark plug if it is not already attached.
- 3) Turn the fuel shut-off valve to the "ON" position.
- 4) Move the choke lever on the engine to the "CHOKE" position. (A warm engine may not require choking)
- 5) Move the throttle control lever on engine to the "FAST" position.
- 6) Grasp the starter handle and pull the rope out slowly until the rope becomes slightly harder to pull (this is the start of the compression cycle in the engine). Let the rope rewind slowly.
- 7) Pull the rope with a rapid, full stroke. Keep a firm grip on the starter handle. Do not let the starter handle snap back against the starter.
- 8) Repeat steps 6 and 7 until engine starts. When engine starts, move the choke control gradually to the "RUN" position.

HOW TO STOP YOUR LAWN-VAC UNIT:

- 1) To stop the engine, move the throttle control lever to the "OFF" position.
- 2) Turn the fuel shut-off valve to the "OFF" position.
- 3) If the equipment is going to be unattended for an extended period of time, or is going to be serviced, unplug the spark plug wire from the spark plug.

⚠ CAUTION: The muffler and adjacent areas are extremely HOT!

USING YOUR LAWN-VAC UNIT

⚠ CAUTION: Vehicle braking and stability may be affected with the addition of an accessory or attachment. Be aware of changing conditions on slopes. Stopping distances will be greatly reduced. Refer to your tractor manual for safety instructions.

- 1) Inspect the unit to make sure that the mower deck adapter, hose, blower housing, upper chute, and canopy boot are all properly attached.
- 2) Check that the lower flap at the rear of the canopy is lying to the inside of the cart bed.
- 3) Check the tires for proper inflation. This should be 30 psi.
- 4) Check that the engine has the proper level of oil and gasoline.
- 5) Begin operation with the tractor at low speed, adjusting forward speed to match grass height and/or moisture condition of the grass in order to prevent clogging.
- 6) Do not attempt to vacuum up any yard debris other than grass and leaves.

WARNING: Should your unit become clogged, shut off tractor and lawn-vac engines. Do not attempt to unclog unit without removing the spark plug wire from the spark plug. This will prevent accidental starting of the engine.

TO EMPTY YOUR LAWN-VAC UNIT:

- 1) Shut off the tractor engine and set the brake.
- 2) Shut off the lawn-vac engine.
- 3) Using your foot, release the bed/canopy assembly by pushing the bed lock bar back toward the engine.

⚠ CAUTION: Due to the use of the gas spring to assist dumping of the cart and canopy, the cart bed/canopy assembly may spring forward rapidly. To avoid possible injury, stay clear of the cart bed/canopy assembly and the cable assembly that is attached to the canopy. Also, be sure that no one is near the unit before releasing the bed lock bar.

- 4) Use a rake or suitable tool to draw the yard debris away from the cart bed.
- 5) After the cart is emptied, pull down on the canopy handle to close the canopy. Tip the bed/canopy assembly forward to secure it to the lock bar latch.
- 6) Go to the front of the unit and attach the canopy boot back to the upper chute.

TO USE YOUR CART WITHOUT THE PolyVAC SYSTEM:

HOW TO CONVERT YOUR PolyVAC TO A GARDEN CART

⚠ CAUTION: The muffler and adjacent areas are extremely HOT!

- 1) Remove the cable assembly from the canopy by releasing the quick link on the cable assembly. (Step 16)
- 2) Using your foot, release the bed/canopy assembly by pushing the bed lock bar back toward the engine.

⚠ CAUTION: Due to the use of the gas spring to assist dumping of the cart and canopy, the cart bed/canopy assembly may spring forward rapidly. To avoid possible injury, stay clear of the cart bed/canopy assembly and the cable assembly that is attached to the canopy. Also, be sure that no one is near the unit before releasing the bed lock bar.

- 3) Detach the front panel of the canopy by unbolting the bottom flap of the front panel from the bed. (Step 9)
- 4) Place the cart tires on top of a two-by-four or an equivalent object to elevate the cart bed and tires off the ground. This will allow the Gas Spring full extension and aid in its removal

⚠ WARNING: The Gas Spring must be removed from the unit when being used without the polyVAC system. The cart will not dump properly without the Gas Spring still installed and may result in damage to the cart and/or possible injury.

MAINTENANCE

GENERAL:

The key to years of trouble-free service is to keep your polyVAC unit clean and dry. Unauthorized modifications to the unit may impair its function and safety.

Occasionally check all moving parts for free movement and if necessary lubricate with oil. Should rust develop, sand lightly and then paint with enamel.

Check the engine oil level before each use. Maintain as instructed in the engine owners manual.

BREAK-IN SCHEDULE:

5 Hours

- 1) Disconnect spark plug wire.

- 2) Remove the hose from the blower housing.
- 3) Insert a block of wood or other suitable object to prevent rotation of the impeller.
- 4) Using a torque wrench with 9/16" socket and 8" extension, Re-torque the impeller bolt on the end of the impeller (item 84, page 9) to 45 ft-lbs.
- 5) Clean the debris from the impeller.
- 6) Re-install the blower hose and spark plug wire.
- 7) Check the unit for loose bolts and tighten where necessary.
- 8) Change engine oil. See engine owner's manual for required schedules and recommended oil specifications.

10 Hours

- 1) Perform steps 1 through 7 detailed in 5 Hours.
- 2) Using a stiff bristle brush and soap and water, clean mesh screens on canopy.
- 3) Remove build-up of debris on inside of canopy sidewalls with soap and water.
- 4) Verify tire pressure is between 28 and 30 psi. Apply grease to wheel bearings using grease fittings.
- 5) Check engine oil level.

NORMAL MAINTENANCE (15 Hours and Beyond)

Perform the following Steps every season or at 15-hour intervals whichever occurs first.

- 1) Perform steps 1 through 7 detailed in 5 Hours
- 2) Perform steps 2 through 4 detailed in 10 Hours
- 3) Change engine oil per engine owner's manual. Follow required schedules and recommend oil specifications.
- 4) Service engine air cleaners if heavy soil is observed.
- 5) Lubricate moving parts.
- 6) Check all fasteners for tightness.
- 7) Inspect blower housing, chute, and hose for wear. Replace with authorized factory replacements if worn.
- 8) Inspect canopy for wear. Patch or replace worn fabric.
WARNING: If tears exist on the rear of the canopy opposite the chute exhaust, the canopy must be replaced.

ENGINE MAINTENANCE

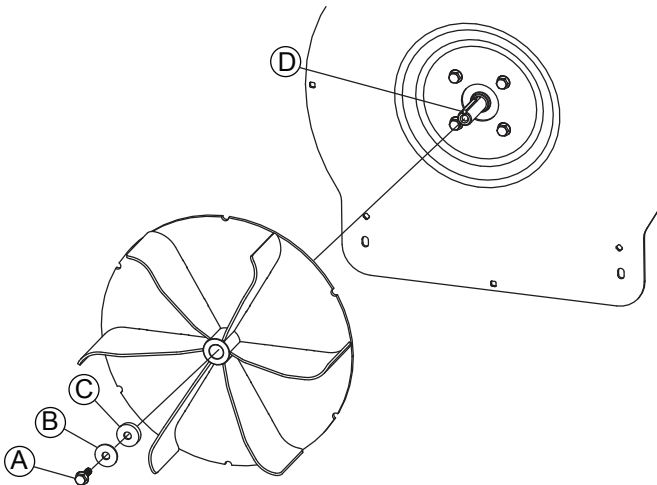
WARNING: Always stop engine and disconnect the spark plug wire before performing and cleaning, lubricating, or other repairs to the engine or impeller assembly.

- 1) Check engine oil level before each use. Only use high quality oils. An SAE 30 grade oil with an API service classification of SF or SG is recommended. Refer to the engine owner's manual for requirements.
- 2) Service the air cleaner as required by the owner's manual. It is recommended that the service schedule extremely dusty conditions be followed.
- 3) At the start of each season the spark plug should be cleaned and the gap set. Refer to the owner's manual for specifications.
- 4) The impeller assembly normally does not require removal. It can be cleaned while on the engine. If however the impeller assembly (B-6890-15) is removed, the use of a spring washer (B-6697), a special washer (B-7131-01) and high strength bolt (B-7129) is required for re-assembly. The following procedure must be followed:

IMPORTANT: Avoid damage! A bent or damaged impeller will not be balanced and can cause engine damage.

Remove the impeller as follows:

1. Stop engine and disconnect spark plug.
2. Remove the blower hose from the blower housing.
3. Remove the blower housing from the blower housing plate.

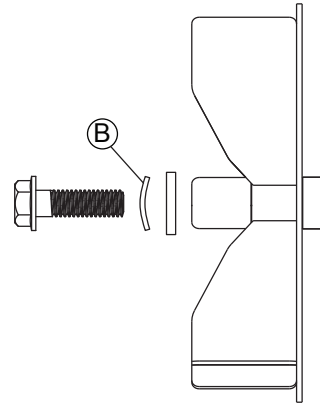


4. Remove the bolt (A), spring washer (B) and flat washer (C) and pull the impeller from the engine shaft (D).
5. Clean the engine shaft and the impeller hub of corrosion, rust, or other materials.

Installing Impeller

1. Stop engine and disconnect spark plug.

NOTE: Make sure spring washer (B) is installed in proper orientation, as shown in illustration.



2. Place the impeller on the tapered engine shaft. Install the bolt with spring washer and flat washer into the engine shaft. Tighten bolt to 61 N•m (45 lb-ft).
3. Install the blower housing to the blower housing plate and secure with the original hardware. Install the blower hose to the blower housing and tighten hose clamp securely.

STORAGE

- 1) The impeller assembly must be cleaned prior to storage for the season and more often if heavy wet grass is encountered. The following procedure outlines the steps necessary:
 - a) Disconnect spark plug from engine.
 - b) Remove the hose at the connection to the blower housing.
 - c) Remove the 8 screws connecting the blower housing to the blower housing plate.
 - d) Using a putty knife or other suitable tool, scrape the impeller assembly to remove yard debris from the impeller assembly. Warm water with soap will aid in this process. A light coat of spray paint or oil will aid in preventing the surfaces from rusting during the storage period.
 - e) Reassemble unit.
- 2) Thoroughly clean the entire unit of yard debris. Clean the screens to assure adequate air flow.
- 3) Lubricate moving surfaces with a light grade oil. Grease the wheel bearings.
- 4) Clean the engine according to the engine owner's manual. For extended storage, it is important to prevent gum deposits from forming in the engine fuel system. Refer to the engine owner's manual for the proper procedure.
- 5) Store unit in a clean dry area.

TROUBLESHOOTING

PROBLEM	CAUSE/CONDITION	REMEDY
ENGINE FAILS TO START*	Spark plug wire disconnected.	Connect wire to spark plug.
	Fuel tank empty, or stale fuel.	Fill tank with fresh fuel.
	Fuel shut-off valve closed.	Open fuel shut-off valve.
	Faulty spark plug.	Clean, adjust gap or replace.
LOSS OF POWER OR ENGINE RUNS ERRATIC*	Spark plug wire loose.	Connect and tighten spark plug wire.
	Unit running on CHOKE.	Move choke lever to OFF position.
	Blocked fuel line or stale fuel.	Clean fuel line; fill tank with fresh fuel.
	Water or dirt in fuel system.	Disconnect fuel line at carburetor to drain fuel tank. Refill with fresh fuel.
	Carburetor out of adjustment.	Adjust carburetor.*
Dirty air cleaner.	Service air cleaner.*	
ENGINE OVERHEATS*	Carburetor not adjusted properly.	Adjust carburetor.*
	Engine oil level low.	Fill crankcase with proper oil.
	Engine clogged with debris.	Clean debris from the engine's cooling system.
TOO MUCH VIBRATION	Loose parts/fasteners.	Stop engine immediately and disconnect the spark plug wire. Tighten all nuts and bolts.
	Debris built up on impeller.	Clean impeller with scraper to remove debris.
	damage to impeller.	Replace impeller.
UNIT DOES NOT DISCHARGE DEBRIS INTO CANOPY/BED	Hose clogged.	Stop engine immediately and disconnect spark plug wire. Remove hose from deck adapter and blower housing, and clean out inside of hose. If clogging continues, grass/debris is too wet. Wait for drier conditions.
	Upper chute clogged.	Stop engine immediately and disconnect spark plug wire. Clean inside of upper chute. If clogging continues, grass/debris is too wet. Wait for drier conditions.
	Foreign object is lodged in impeller.	Stop engine immediately and disconnect spark plug wire. Remove hose from blower housing and remove lodged object. If object/debris is too large, remove blower housing and remove object/debris.
	Engine is running too slow.	Use engine at full throttle.
	Unit is full.	Empty cart.
EXCESSIVE AMOUNT OF GRASS LEAKS AT THE REAR OF UNIT	Canopy is not tied down with the bungee tie straps	Connect both bungee tie straps to the bed per instructions.
	Flap at the rear of canopy is not lying properly against the bed	Make sure the flap is lying inside the bed.
CANOPY WILL NOT STAY OPEN	Gas spring not working properly.	Check gas spring for damage or wear; replace if necessary.
	Cable assembly is not connected to the canopy.	Connect cable assembly to the canopy per instructions.
LOAD DOES NOT DUMP CLEANLY	Large amount of yard debris has been collected.	Drive tractor forward (a few feet) while unit is in the dump position.

NOTE:

* - Refer to engine manual packed with your unit.

- For repairs beyond the minor adjustments listed above, please contact your nearest authorized service dealer.

ENGINE:

The engine is warranted by the manufacturer and can be serviced by any factory authorized service center. Refer to your engine manual for warranty, service, and optional information.

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MANUFACTURER'S LIMITED WARRANTY FOR



Pull Behind Accessories

The limited warranty set forth below is given by Brinly-Hardy Company with respect to new merchandise purchased and used in the United States, its possessions and territories.

Brinly-Hardy Company warrants the products listed below against defects in material and workmanship, and will at its option, repair or replace, free of charge, any part found to be defective in materials or workmanship. This limited warranty shall only apply if this product has been assembled, operated, and maintained in accordance with the Owner's manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water, or damage because of other peril or natural disaster.

Normal Wear Parts or components thereof are subject to separate terms as follows: All normal wear parts or component failures will be covered on the product for a period of 90 days.

Parts found to be defective within the warranty period will be replaced at our expense. Our obligation under this warranty is expressly limited to the replacement or repair, at our option, of parts found to be defective in material and workmanship.

HOW TO OBTAIN SERVICE: Warranty parts replacements are available, ONLY WITH PROOF OF PURCHASE, through our Pull Behind Accessories Customer Service Department. Call 877-728-8224.

This limited warranty does not provide coverage in the following cases:

- a) Routine maintenance items such as lubricants and filters.
- b) Normal deterioration of the exterior finish due to use or exposure.
- c) Transportation and/or labor charges.
- d) The warranty does not include commercial and/or rental use.

No implied warranty, including any implied warranty of merchantability of fitness for a particular purpose, applies after the applicable period of express written warranty above as to the part as identified below. No other express warranty whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product, shall bind Brinly-Hardy Co. During the period of the warranty, the exclusive remedy is repair or replacement of the product as set forth above.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. Brinly-Hardy Company shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

During the warranty period, the exclusive remedy is replacement of the part. In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. Alteration of safety features of the product shall void this warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the misuse or inability to use this product.

This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

HOW STATE LAW RELATES TO THIS WARRANTY: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IMPORTANT: The Warranty period stated below begins with the PROOF OF PURCHASE. Without the proof of purchase, the Warranty period begins from the date of manufacture determined by the serial number manufacturing date.

LAWN/VAC WARRANTY PERIOD:

The warranty period for this LawnVac system is as follows: Steel Frame Parts – 2 Years. Poly Bed – 2 Years. Hose, Blower Housing and Impeller – 1 Year. Tires and Wheels are normal wear parts - 90 days

The Engine is warranted by Briggs & Stratton. Warranty information can be found in the Engine Owner's Manual.

Brinly-Hardy Company, 3230 Industrial Parkway, Jeffersonville, IN 47130