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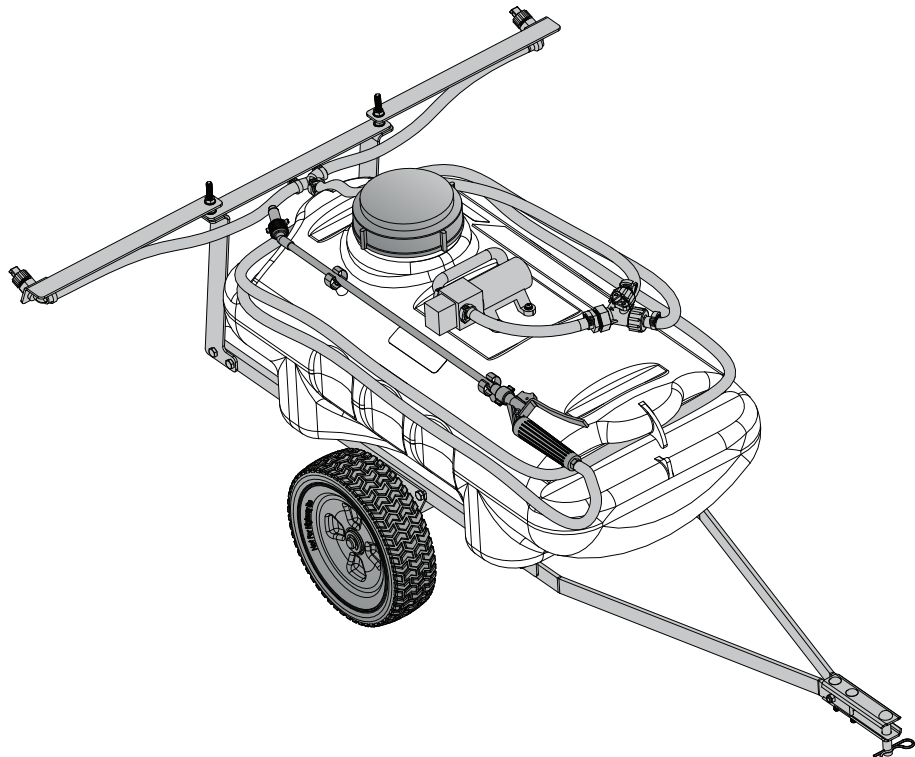
OWNER'S MANUAL

15 GALLON TOW-BEHIND SPRAYER

MODEL:

ST-152BH

- Assembly
- Installation
- Operation
- Repair Parts



This sprayer is designed for use with lawn tractors and lawn and garden tractors.

Call Customer Service, Toll-Free: 877-728-8224

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!

INTRODUCTION AND SAFETY

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

Should you experience any problem you cannot easily remedy, please do not hesitate to contact our knowledgeable customer service department toll-free at 1-877-728-8224. We have competent, well trained technicians to help you with the assembly and use of your sprayer.



CUSTOMER RESPONSIBILITIES

- Please read & retain this manual. The instructions will enable to assemble and maintain your product properly.
- Please carefully read and observe the SAFETY SECTION of this manual.
- Follow a regular schedule in maintaining and caring for your Brinly-Hardy product.

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RECORD PURCHASE INFORMATION

Record your purchase information in the spaces provided below:

Date of Purchase _____

Company Name _____

Company Phone _____

Serial Number _____



Tools Required for Assembly:

- 1/2" Wrench and Socket
- 7/16" Wrench and Socket
- Slip Joint Pliers
- Phillips Screwdriver
- Gloves
- Eye Protection

SAFETY

RULES FOR SAFE OPERATION

- Know controls and how to stop safely, READ THE OWNER'S MANUAL before operating.
- 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.



This symbol will help to point out the important safety precautions throughout this manual. It means: **ATTENTION! BECOME ALERT!** Your safety is involved.

SAFETY

GENERAL NOTES *(Operation)*

Caution should be taken when towing and/or using any at-attachment. This attachment combined with the weight distribution, turning radius, and speed of towing vehicle can result in severe injury or death to operator, damage to towing vehicle, and/or attachment if not used properly. Follow all towing safety precautions noted in the towing vehicle owner's manual, including the following precautions:

- Ensure the combined weight of the towing vehicle (tow vehicle weight + operator weight) is greater than the maximum towed weight of attachment (empty attachment weight + weight of load).
- Do not exceed maximum towing capacity of towing vehicle.
- Do not exceed the maximum drawbar pull rating of the towing vehicle. Drawbar pull is the horizontal force required to pull the attachment (including weight of load).
- Only tow this product in the vehicle's tow mode / speed setting or less than 5 mph. Do not exceed 5 mph.
- Towing speed should always be slow enough to maintain control. Travel slowly and use caution when traveling over rough terrain. Avoid holes, rocks and roots.
- Slow down before you turn and do not turn sharply.
- Use wide turning angles to ensure the attachment follows the path of the towing vehicle.
- Do not use attachment on steep slopes. A heavy load could cause loss of control or overturn attachment and towing vehicle. Additional weights may need to be added to your vehicle; check with towing vehicle manufacturer for recommendations.
- Reduce towed weight when operating on slopes.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed, directions, or turning.
- If you start and stop suddenly on hills, you may lose steering control or the towing vehicle may tip. Do not start or stop suddenly when going uphill or downhill. Avoid uphill starts.
- Slow down and use extra care on hillsides. Turf conditions can affect vehicle stability. Use extreme caution while operating near drop-offs.
- Do not drive close to creeks, ditches and public highways.
- Watch out for traffic when crossing near roadways.
- Use care when loading or unloading the vehicle into a trailer or truck.
- The attachment can obstruct the view to the rear. Use extra care when operating in reverse.
- When reversing, carefully back-up straight to avoid jackknifing. Do not allow towing vehicle wheels to contact attachment draw bar. Damage could result.
- Stop on level ground, disengage drives, set the parking brake, and shut off engine before leaving the operator's position for any reason including emptying the attachment.
- Use this attachment for intended purpose only.
- This attachment is intended for use in lawn care and home applications. Do not tow behind a vehicle on a highway or in any high speed applications. Do not tow at speeds higher than the maximum recommend towing speed.
- Do not tow this product behind a motor vehicle such as a car or truck.
- Always wear substantial footwear. Do not wear loose fitting clothing that can get caught in moving parts.
- Keep your eyes and mind on your towing vehicle, attachment and area being covered. Do not let other interests distract you.
- Stay alert for holes and other hidden hazards in the terrain.

- Keep the towing vehicle and attachment in good operating condition and keep safety devices in place.
- The towing vehicle and attachment should be stopped and inspected for damage after striking a foreign object. Any damage should be repaired before restarting and operating the equipment.
- Keep all parts in good condition and properly installed. Fix damaged parts immediately. Replace worn or broken parts. Replace all worn or damaged safety and instruction decals. Keep all nuts, bolts and screws tight.
- Do not modify the attachment or safety devices. Unauthorized modifications to the towing vehicle or attachment may impair its function, safety and void the warranty.

TOWING VEHICLE AND TOWING SAFELY

- Know your towing vehicle controls and how to stop safely. READ YOUR TOWING VEHICLE OWNER'S MANUAL before operating.
- Check the towing vehicle brake action before you operate. Adjust or service brakes as necessary.
- Stopping distance increases with speed and weight of towed load. Travel slowly and allow extra time and distance to stop.
- Use only approved hitches. Tow this attachment only with a towing vehicle that has a hitch designed for towing. Do not connect this attachment except at the approved hitch point.
- Follow the tow vehicle manufacturer's recommendations for weight limits for towed equipment and towing on slopes. Use counterweights or wheel weights as described in the towing vehicle operator's manual.
- Do not shift to neutral and coast downhill.
- Do not allow children to operate the towing vehicle.
- Do not allow adults to operate the towing vehicle without proper instruction or without having read the owner's manual.

PROTECT THOSE AROUND YOU

- Before you operate any feature of this attachment or towing vehicle, observe your surroundings and look for bystanders.
- Keep children, bystanders and pets at a safe distance away while operating this or any attachment.
- Use care when reversing. Before you back up, look carefully behind for bystanders.

KEEP RIDERS OFF ATTACHMENT & TOWING VEHICLE

- Do not carry passengers.
- Do not let anyone, especially children, ride in / on this attachment, the towing vehicle or hitch bracket. Riders are subject to injury such as being struck by foreign object and /or being thrown off during sudden starts, stops and turns. Riders may also obstruct the operator's view resulting in this attachment being operated in an unsafe manner.

SPRAYER SPECIFIC SAFETY INFORMATION

- Caution should always be exercised when working on or near batteries.
- Heavy gloves and eye protection should be worn when making connections to the battery.

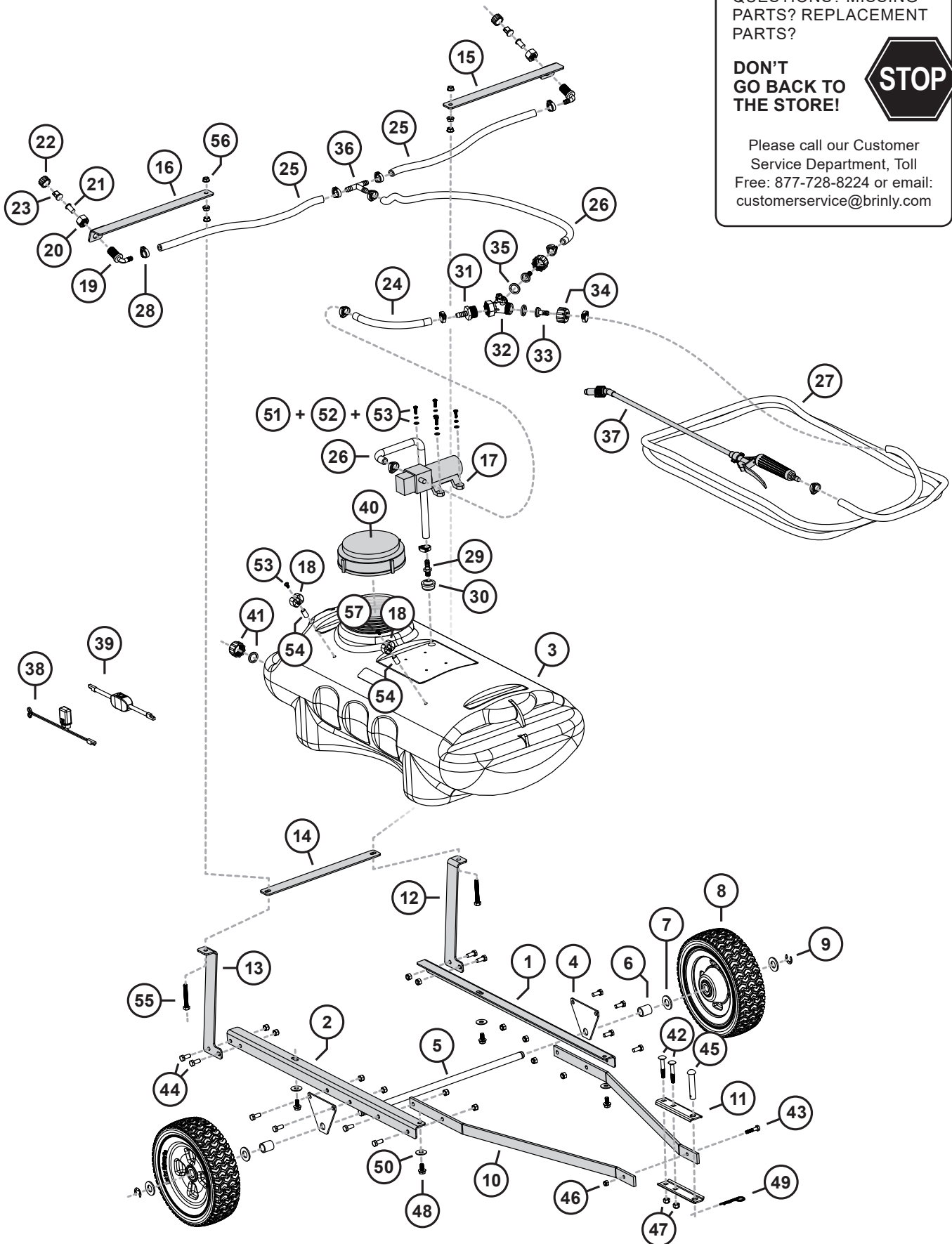
PARTS

INSTALLATION
QUESTIONS? MISSING
PARTS? REPLACEMENT
PARTS?

**DON'T
GO BACK TO
THE STORE!**



Please call our Customer
Service Department, Toll
Free: 877-728-8224 or email:
customerservice@brinly.com



PARTS

ST-152BH

Ref #	Part #	Description	Qty
1	1018925LH-10	Bracket Frame LH Painted	1
2	1018925RH-10	Bracket Frame RH Painted	1
3	1018963	Sprayer Tank, 15 Gal. w/ labels	1
4	1018924-10	Plate Axle Support Painted	2
5	1018930-01	Axle Plated	1
6	B-5691	Spacer; Axle	2
7	45M2121P	Washer; Flat, 5/8"	4
8	1009097	Wheel, 10" x 3"	2
9	F-577	E Ring, 5/8"	2
10	1018926-10	Towbar Painted	2
11	R-892-10	Clevis, Painted	2
12	1018929LH-10	Boom Support LH Painted	1
13	1018929RH-10	Boom Support RH Painted	1
14	1018928-10	Brace Cross Painted	1
15	1018927LH-10	Boom LH Painted	1
16	1018927RH-10	Boom RH Painted	1
17	1016887	Pump, 1 gpm 40 psi	1
24	1016888	Hose, 3/8" x 8"	1
25	B-6087	Hose, 3/8" x 17"	2
26	B-6035	Hose, 3/8" x 22"	2
27	B-6033	Hose, 3/8" x 12'	1
37	B-6400	Hand Wand	1
38	1018962	Wire Harness Batt Conn	1
39	1018961	Wiring Harness w switch	1
40	B-6028	Cap, Tank (<i>Large Cap</i>)	1
41	B-6578-ASM	Cap Assembly (<i>Small Cap</i>)	1

Hardware Bag (1018943)			
18	B-6511	Clip, Wand Holder	2
42	10M1032P	Bolt, Carriage 5/16"-18 x 2"	2
43	11M0824P	Bolt, Carriage 1/4"-20 x 1-1/2"	1
44	2M1012P	Bolt, Hex Hd 5/16"-18 x 3/4"	12
45	B-3861	Pin, Hitch 1/2" x 2-1/2"	1
46	B-4785	Nut, Nylon Lock 1/4"-20	1
47	B-4786	Nut, Nylon Lock 5/16"-18	14
48	B-5695	Bolt, Hex Fl. Head, 5/16"-18 x 5/8"	4
49	D-146P	Cotter, Hairpin 1/8", #211	1
50	R-618	Washer, Special	4
51	1001352	Washer, #10 SS	4
52	1007005	Lock Washer, #10 SS	4
53	22M0616P	Screw; Phillips, #10-24 x 1"	5
54	1019177	Spacer; Nylon, #10 x 5/8"	2
55	2M1036P-FT	Bolt; Hex Head, 5/16" x 2-1/4"	2
56	B-4355	Nut; Whiz Lock, 5/16"-18	6
57	1019182	Screw; Tapping, #10 x 1"	1
		+ part #6, Spacer Axle	(2)
		+ part #7, Flat Washer, 5/8"	(4)
		+ part #9, E-Ring, 5/8"	(2)

Spray Fitting Bag (1018945)			
19	B-6043	Nozzle Body, 90 Degree	2
20	B-6041	Nut, Jam, Plastic	2
21	B-6040	Strainer, Nozzle	2
22	B-6042	Nut, Tip Fitting	2
23	1016989	Spray Tips BF 2.0	2
28	B-6047	Clamp, Hose	12
29	B-6598	Adaptor, 1/8 MPT x 3/8" H.B.	1
30	B-6597	Strainer, 1/4" NPT	1
31	1016549	Male Fitting	1
32	B-6512	Tee, Dual Valve	1
33	B-6055	Hose Barb	2
34	B-6056	Nut, Hose Swivel	2
35	B-6054	Washer; Vinyl, 3/4"	2
36	B-6045	Hose Barb; Tee, 3/8 x 3/8	1

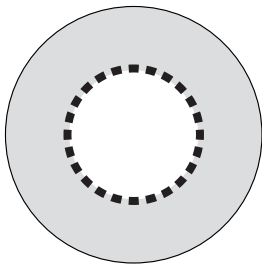
HARDWARE IDENTIFIER

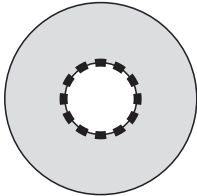
DO NOT RETURN PRODUCT IF YOU ARE MISSING PARTS.


Please Call: 1 (877) 728-8224


Illustrations on this page are to scale for faster identification of hardware during assembly.

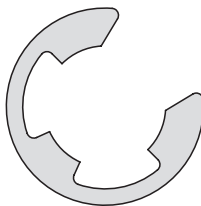
- 7 Washer:
Flat 5/8"
(x4)
45M2121P

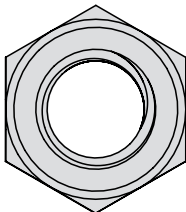

- 50 Washer:
Special
(x4)
R-618



- 51 Washer:
SS #10 (x4)
1001352



- 52 Washer: Lock
SS #10 (x4)
1007005

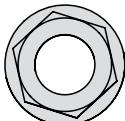

- 9 E-Ring
5/8" (x2)
F-577


- 20 Nut: Jam
Plastic
(x2)
B-6041

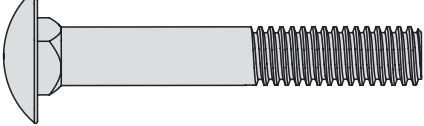

- 46 Nut: Lock
1/4" (x1)
B-4785

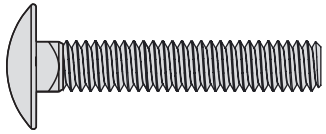

- 47 Nut: Nylon Lock
5/16" (x14)
B-4786

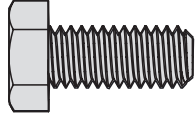

- 56 Nut: Whiz Lock
5/16"-18 (x6)
B-4355

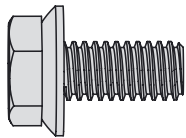



- 42 Bolt: Carriage
5/16" x 2" (x2)
10M1032P

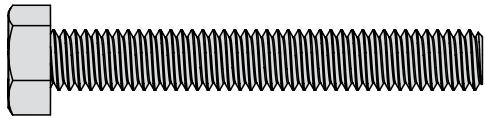

- 43 Bolt: Carriage, SS
1/4" x 1-1/2" (x1)
11M0824P



- 44 Bolt: Hex Head 5/16" x 3/4" (x12)
2M1012P



- 48 Bolt: Hex Fl. Head 5/16" x 5/8" (x4)
B-5695



- 53 Screw: Round Head #10-24 x 1" (x5)
22M0616P



- 55 Bolt: Hex Head
5/16" x 2-1/4" (x2)
2M1036P-FT

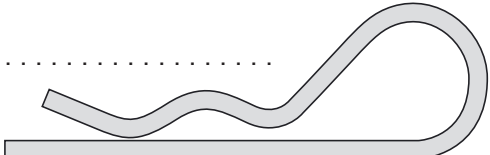

- 57 Screw: Tapping #10 x 1" (x1)
1019182


- 6 Spacer: Axle (x2)
B-5691


- 54 Nylon Spacer: #10 x 5/8" (x2)
1019177


- 45 Hitch Pin
(x1)
B-3861


- 49 Hitch Pin Cotter (x1)
D-146P



ASSEMBLY

Assembly Tips

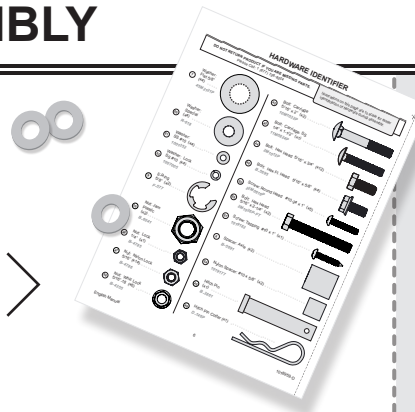
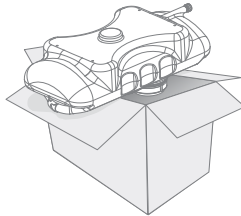
- Illustrations on page 6 are to-scale.

For faster identification of hardware during assembly, lay the hardware on top of the illustrations on page 6.

- Use the Sprayer box.

The sprayer tank is upside-down and can easily shift for Steps 1-5.

During assembly you can work with the sprayer tank resting on top of the box, letting the tank cap nestle down inside the box.



Additional info & videos are available on our website: **brinly.com**

This QR code links directly to the 15-Gallon Sprayer product page:

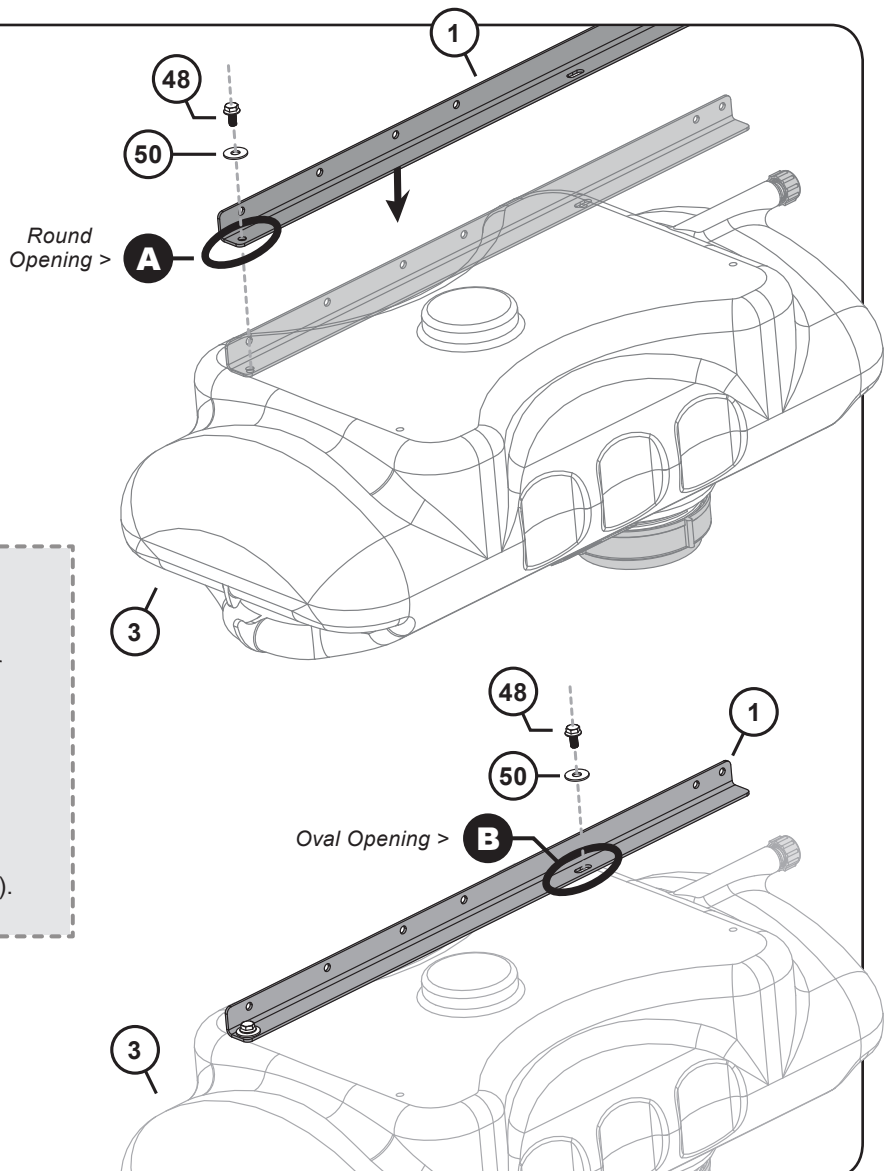


Assembly Step 1

Attaching the Frame Brackets

NOTE: One edge of each of the Frame Brackets (1 & 2) will have two holes, one of which is an **OVAL OPENING**. (This edge lays flat against the sprayer tank).

Align the Left-Hand Frame Bracket (1) with the Sprayer tank (3) as illustrated.



A Add a 5/16" flat washer (50) to a 5/16" flange bolt (48). Run bolt through the circular opening at the base of the Left-Hand Bracket (1).

B Add a 5/16" flat washer (50) to a 5/16" flange bolt (48). Run bolt through the **OVAL OPENING** of the Bracket (1).

x4

Repeat this step on the other side of the tank (3) with the Right-Hand Frame Bracket (2).

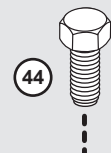
 **SECURE ALL BOLTS FULLY.**

ASSEMBLY

Assembly Step 2

Attaching the Axle Brackets

Align the triangular Axle Bracket (4) with the Frame Bracket (1) as illustrated.

 From the outside edge, run two 5/16" x 3/4" hex head bolts (44) through the triangular Axle Bracket (4) and Frame Bracket (1).

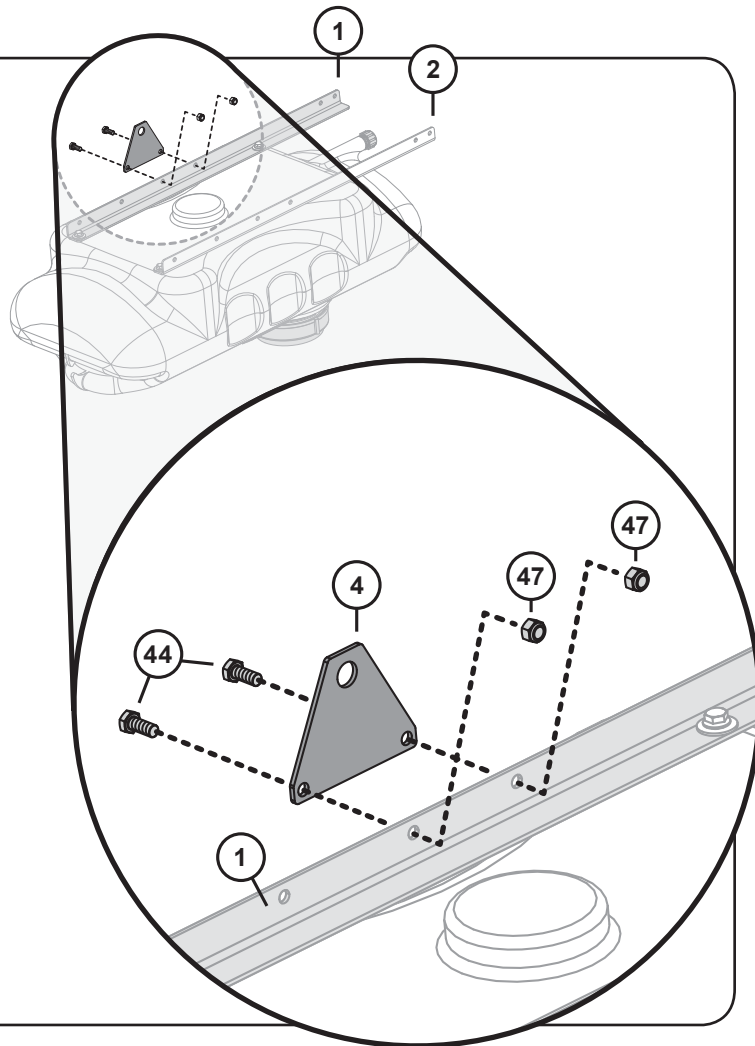
Secure on the inside lip of the frame bracket with two 5/16" hex nuts (47).

x4

Repeat this step on the other side of the tank with the Right-Hand Frame Bracket (2).



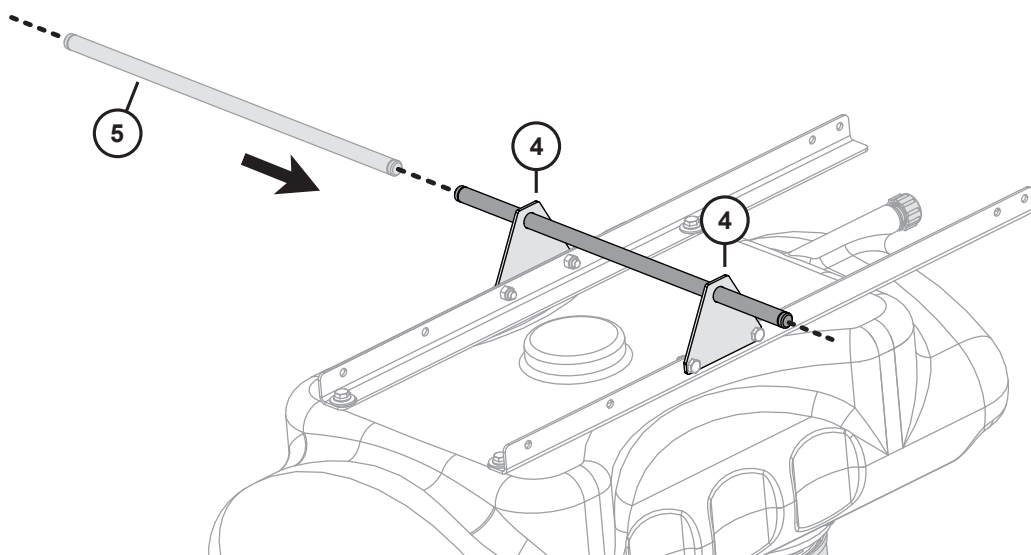
SECURE ALL BOLTS FULLY.



Assembly Step 3-A

Adding the Axle

As illustrated, run the Axle (5) through the triangular Axle Brackets (4) that were added on Step 2.



ASSEMBLY

Assembly Step 3-B

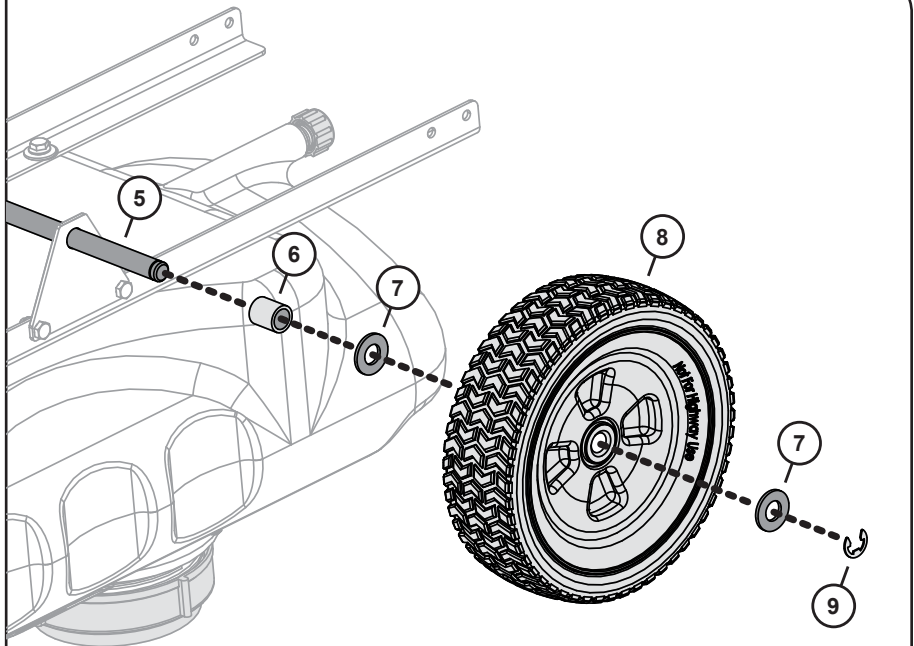
Adding the Wheels

In this order, add the following items to the Axle (5) as illustrated:

- Spacer (6)
- Axle Washer (7)
- Wheel (8)
- Axle Washer (7)

Secure in place by sliding an E-Ring (9) through the slot at the end of the Axle (5). *NOTE: You may need to tap or push the retaining ring into place by applying pressure with a tool.*

Repeat this step on the other end of the Axle (5).



Assembly Step 4

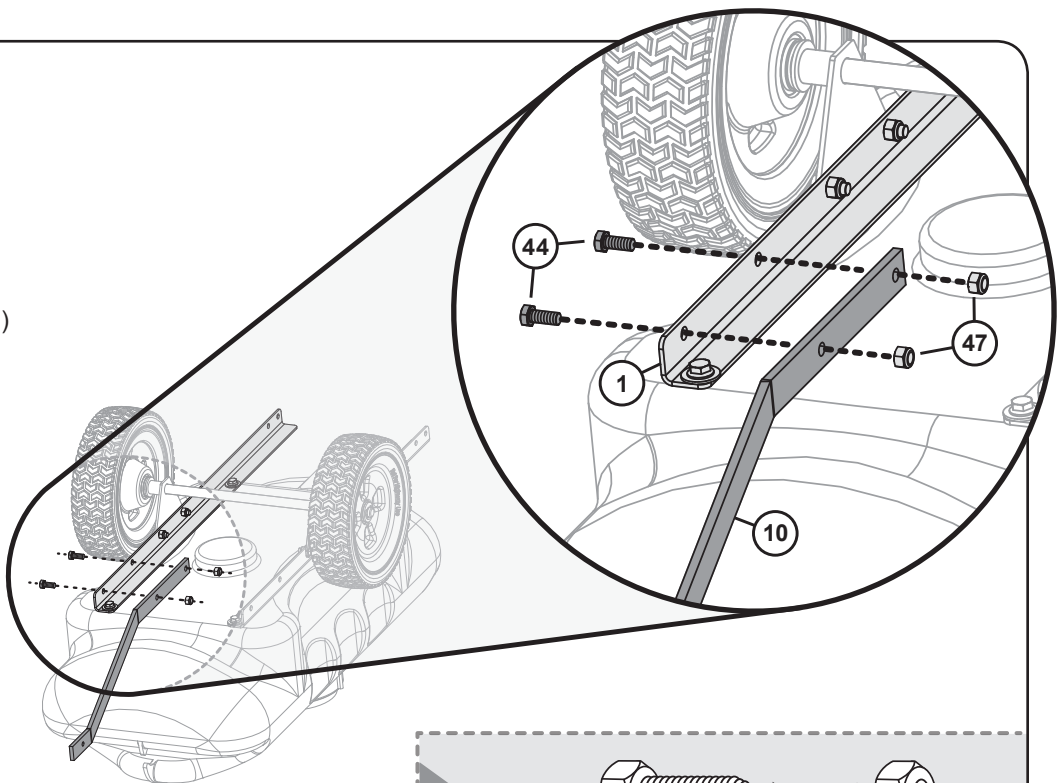
Attaching the Tow Bars

Align one of the Tow Bars (10) against the Left Frame Bracket (1) as illustrated.

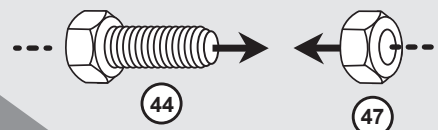
From the outside edge, run two 5/16 x 3/4" hex head bolts (44) through the Frame Bracket (1) and Tow Bar (10).

Secure on the inside edge of the tow bar with two 5/16" hex nuts (47).

Repeat this step against the other frame bracket, attaching the second Tow Bar (10).



x4



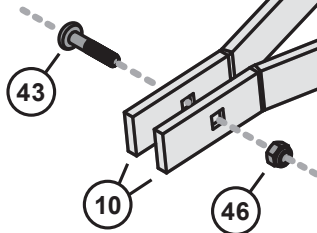
ASSEMBLY

Assembly Step 5

Adding the Clevis

- A. Run the 1/4" x 1-1/2 Bolt (43) through the other end of the two tow bars (10) that were added on Step 4.

Secure with a 1/4" lock nut (46).

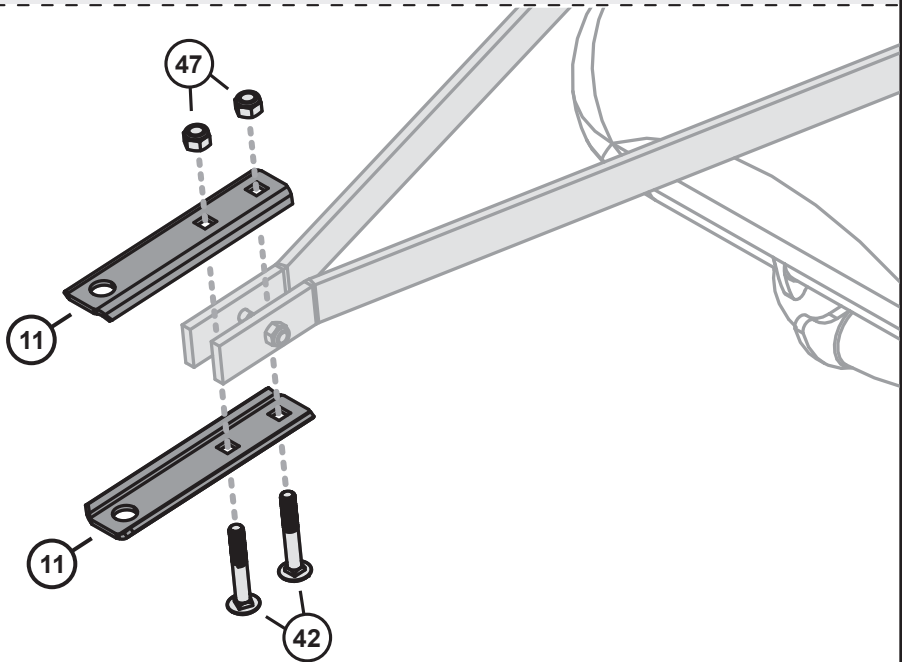


NOTE: Please **DO NOT** tighten until the tow bars are touching. Allow a gap for the bolts on Step 5-B.

- B. Sandwich the two Clevis Brackets (11) around the end of the tow bars as illustrated.

From below, run two 5/16 x 2" Bolts (42) through the square Clevis Bracket (11) openings.

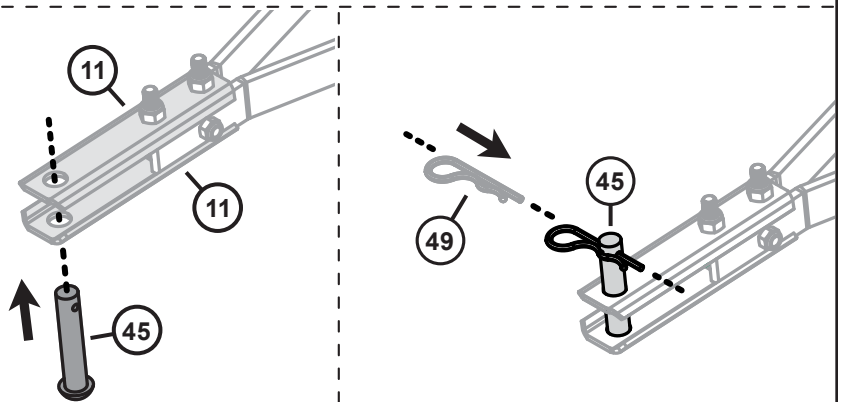
Secure each bolt fully with a 5/16" lock nut (47).



- C. From below, run the Clevis Pin (45) through the large, circular opening of the Clevis Brackets (11).

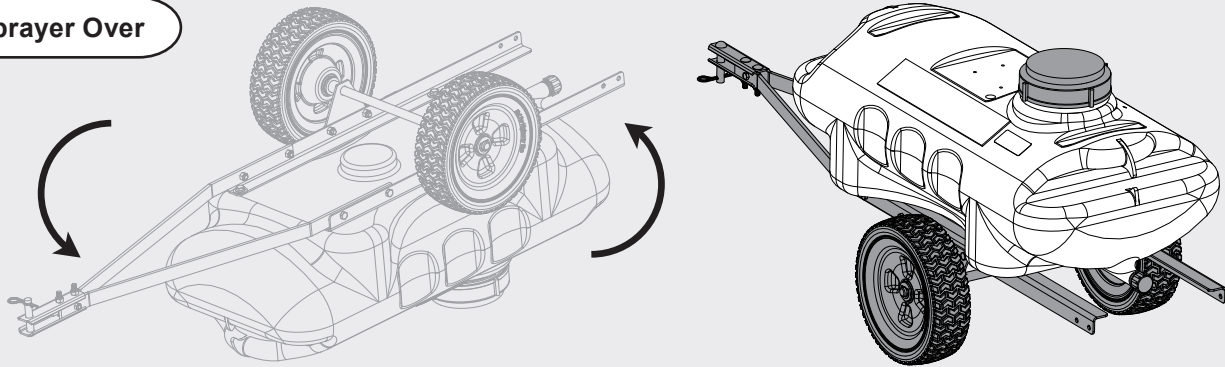
Secure the Clevis Pin (45) with a Cotter Pin (49).

NOTE: You may need to tap or push the cotter pin into place by applying pressure with a tool.



ASSEMBLY

Flip Sprayer Over



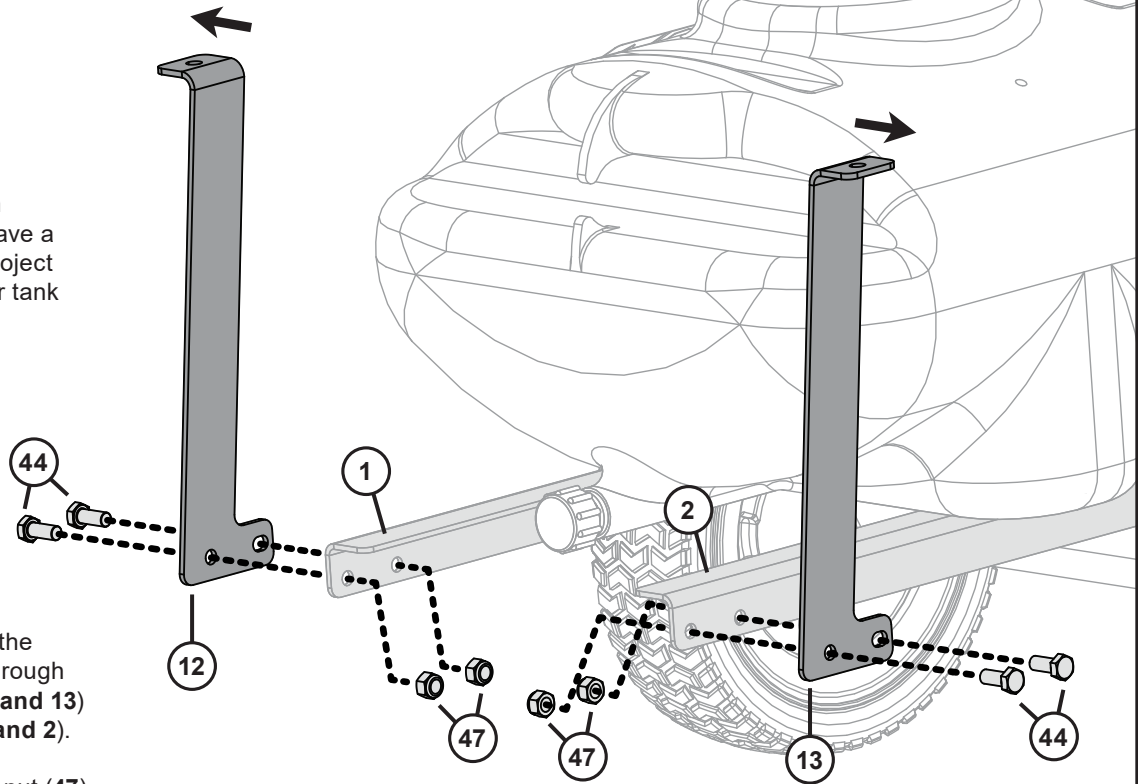
Assembly Step 6

Adding the Boom Supports

The left and right boom supports (12 and 13) have a lip at the top that will project away from the spreader tank as illustrated.

From the **OUTSIDE** edges, add the 5/16 x 3/4" Bolts (44) through the boom supports (12 and 13) and frame brackets (1 and 2).

Secure with a 3/4" lock nut (47).



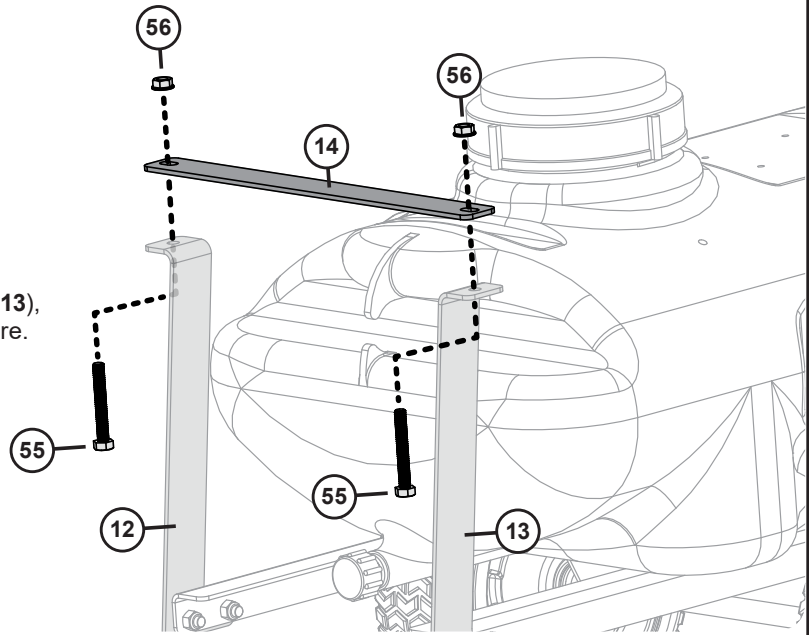
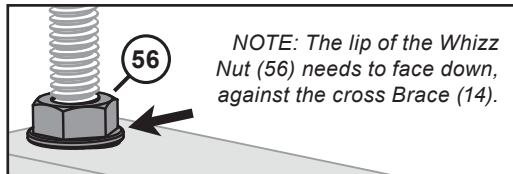
ASSEMBLY

Assembly Step 7

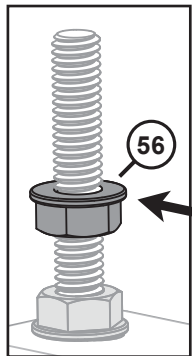
Adding the Cross Brace

- A. Align the Cross Brace (14) across the two Boom Supports (12 and 13) added on Step 6.
- B. From below the lip of the boom supports (12 and 13), run the 5/16 x 2-1/4" Bolt (55) up, as illustrated here.

Secure the Bolt (55) in place with a Whizz Nut (56).

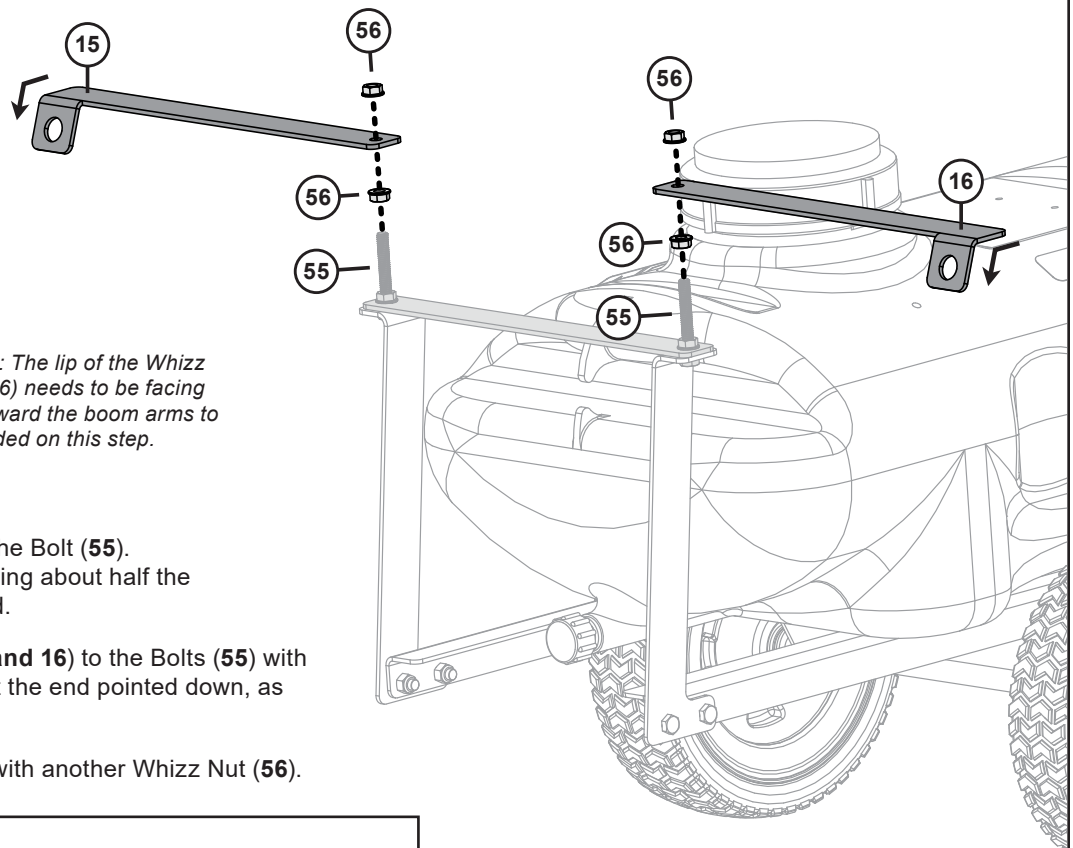
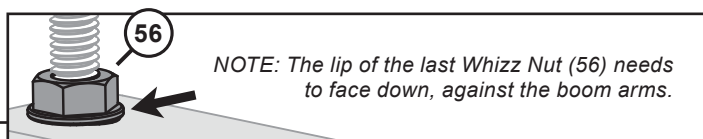


Adding the Boom Arms

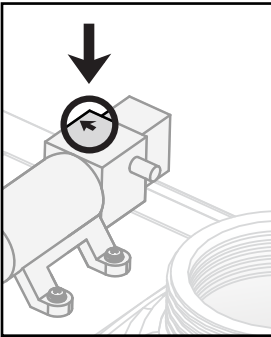


- C. Add a Whizz Nut (56) to the Bolt (55). Rotate the nut down, leaving about half the length of the bolt exposed.
- D. Add the Boom Arms (15 and 16) to the Bolts (55) with the slightly angled tabs at the end pointed down, as illustrated here.

Secure each Boom Arm with another Whizz Nut (56).



ASSEMBLY



NOTE: Alignment on this step is crucial for the sprayer to function properly. The Pump has a very small arrow indicating the Barb flow. This arrow needs to point away from the tank lid.



Assembly Step 8

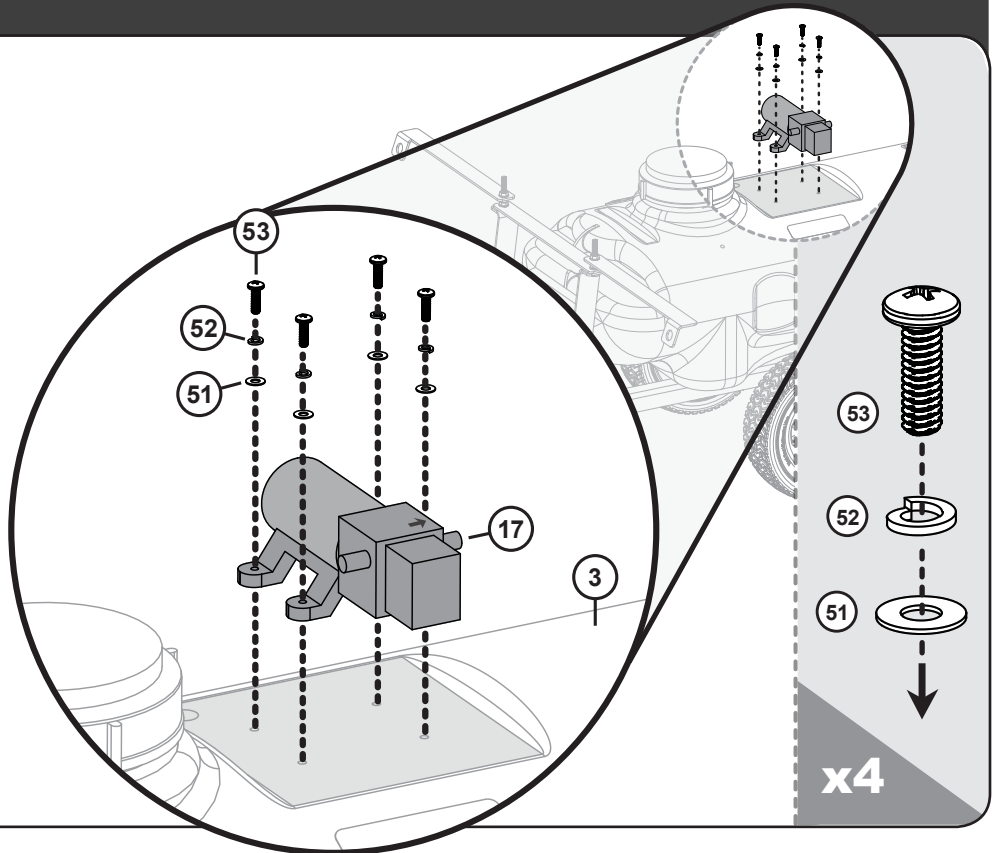
Attaching the Pump

Find the flat panel beside the lid of the tank (3). Align the pump (17) with the four small openings on that flat panel.

Add a #10 lock washer (52) to four of the #10-24 x 1" phillips head screws (53).

After that, add a #10 flat washer (51) to each of the screws.

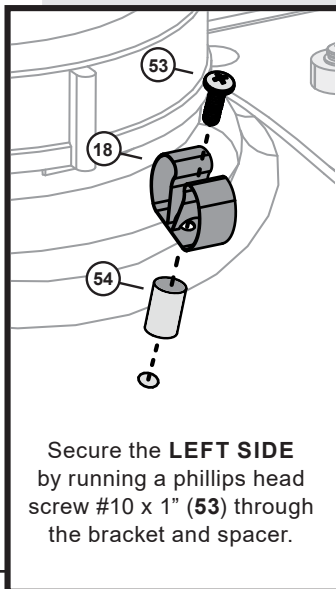
Use these four screws to secure the pump (17) to the tank (3).



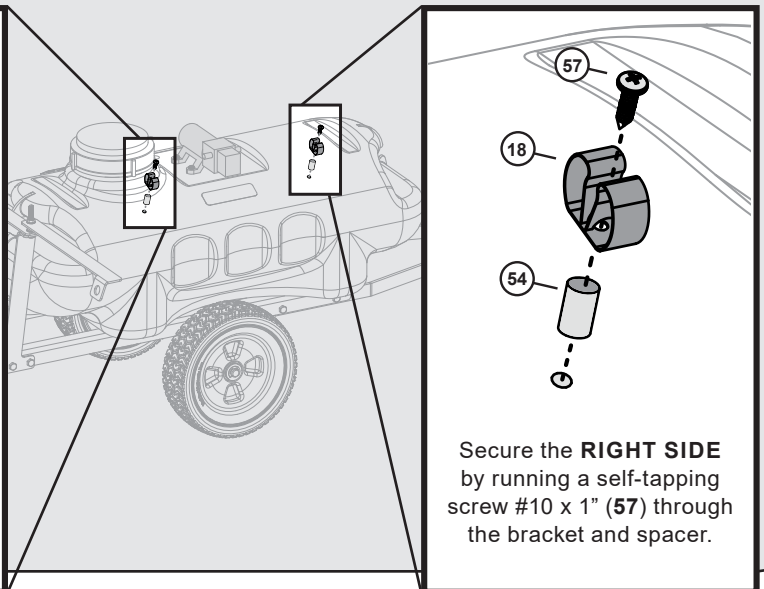
Assembly Step 9

On the edge of the tank (3), find the small openings on each side of the Brinly logo.

Align the spacers (54) and wand brackets (18) as illustrated here.



Secure the **LEFT SIDE** by running a phillips head screw #10 x 1" (53) through the bracket and spacer.



Secure the **RIGHT SIDE** by running a self-tapping screw #10 x 1" (57) through the bracket and spacer.

ASSEMBLY

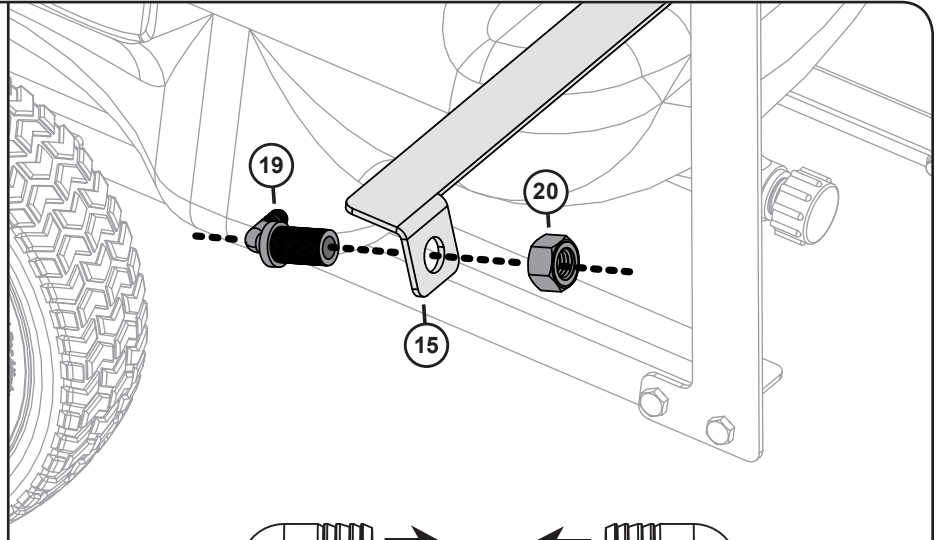
Assembly Step 10

Adding the Boom Nozzles

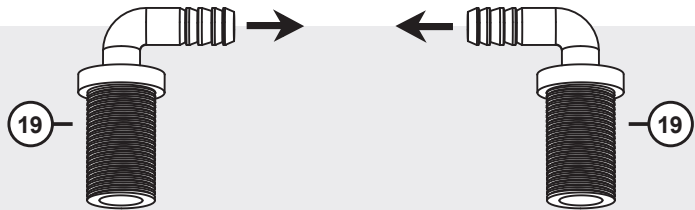
A. Left Boom Arm

From below the Left Boom Arm (15), slide the thick end of a 90° Nozzle Body (19) as illustrated here.

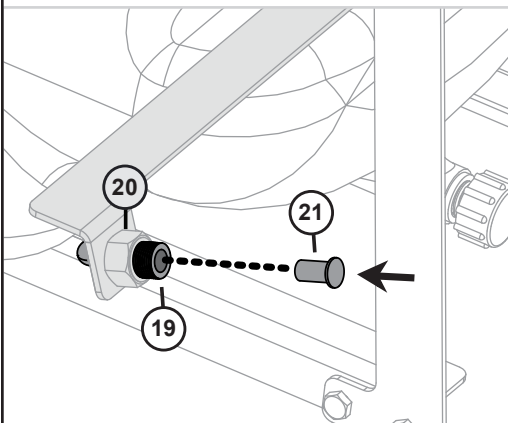
Secure in place with a Jam Nut (20).



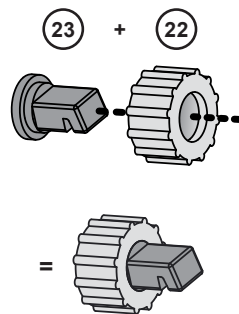
NOTE: The 90° Nozzle Bodies (19) added on this step need to point toward each other before being secured fully.



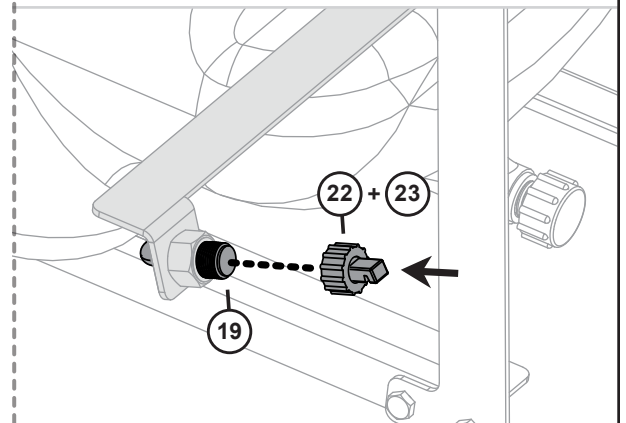
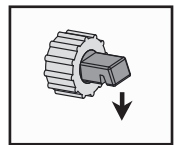
B. Add the Filter (21) by guiding it down into the opening of the 90° Nozzle Body (19) as illustrated.



C. Slide the Red Nozzle (23) through the Fitting Nut (22).



D. While holding the tip of the Red Nozzle (23) pointing down toward the ground, add this to the 90° Nozzle Body (19).



E. Right Boom Arm

Repeat 10-A through 10-D to attach the second Boom Nozzle (19) to the Right Boom Arm (16).

ASSEMBLY

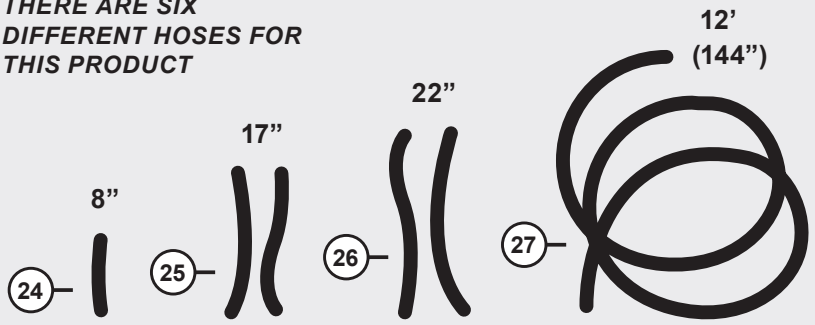
Assembly Tips

IT CAN BE TRICKY TO INSERT THE HOSE BARBS

Try dipping the ends of your hoses in soapy water.



THERE ARE SIX DIFFERENT HOSES FOR THIS PRODUCT



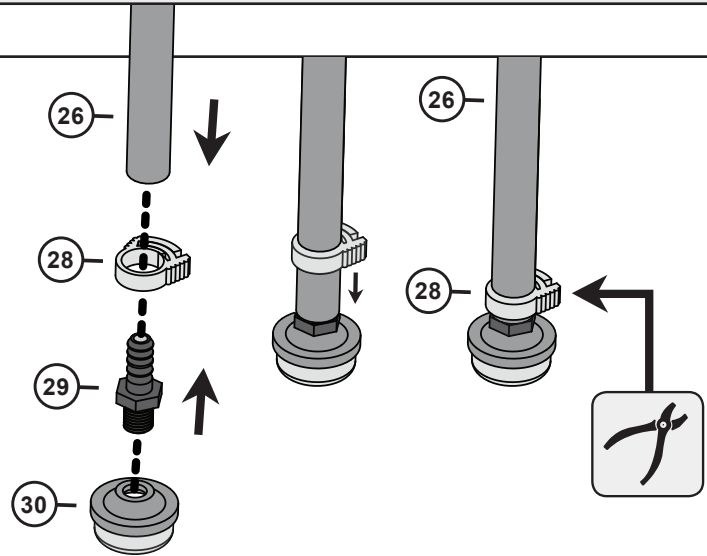
Assembly Step 11

Adding the First 22" Hose

Slide a Clamp (28) on one end of a 22" Hose (26).

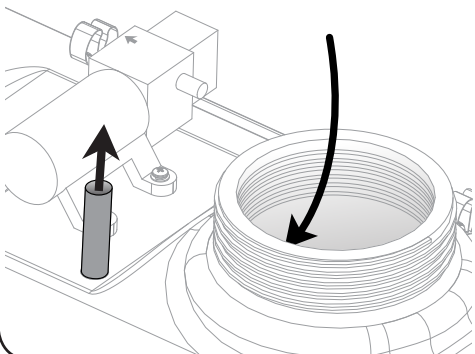
Insert the ridged end of an Adaptor (29) into the hose, then attach the 1/4" Strainer (30) to the other end of the adaptor.

Slide the clamp toward the adaptor (29) / near the end of the Hose (26) and clamp fully with pliers.

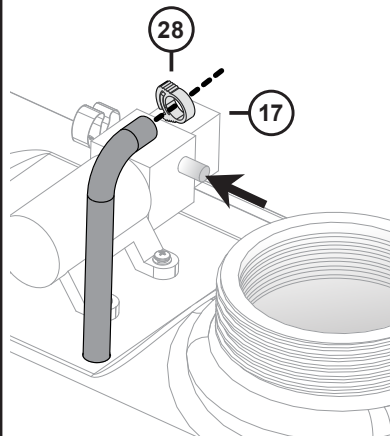


Remove the tank cap and drop the hose down inside the tank.

Reach inside the tank and feed the raw end of the hose up and out, through the opening just beside the pump.



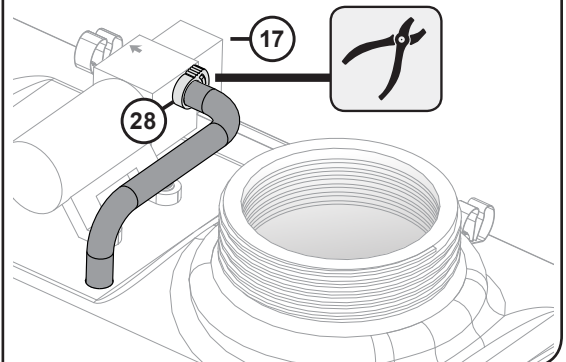
Slide a Clamp (28) to the raw end of the hose, then connect the hose on the barb of the pump (17) facing the lid of the tank.



Confirm again that the pump was installed the correct direction. *There is a small arrow beside one of the barbs. This hose connects to the barb WITHOUT an arrow indicator.*

Slide the clamp (28) toward the pump (17) and secure it fully with pliers.

Replace the tank cap.



ASSEMBLY

Assembly Step 12

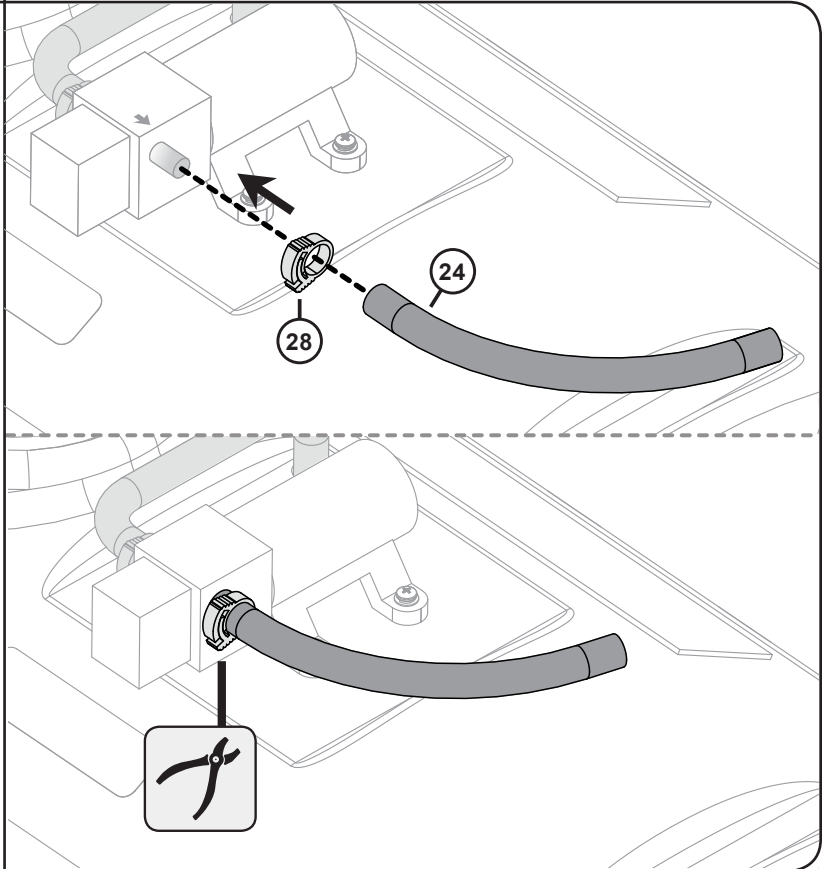
Adding the 8" Hose

Add a Clamp (28) on the end of the 8" Hose (24).

Switching to the other side of the pump (17), slide the hose onto the remaining barb extending away from the lid of the tank.

Note: Beside this barb, there is a very small arrow noting the direction of flow.

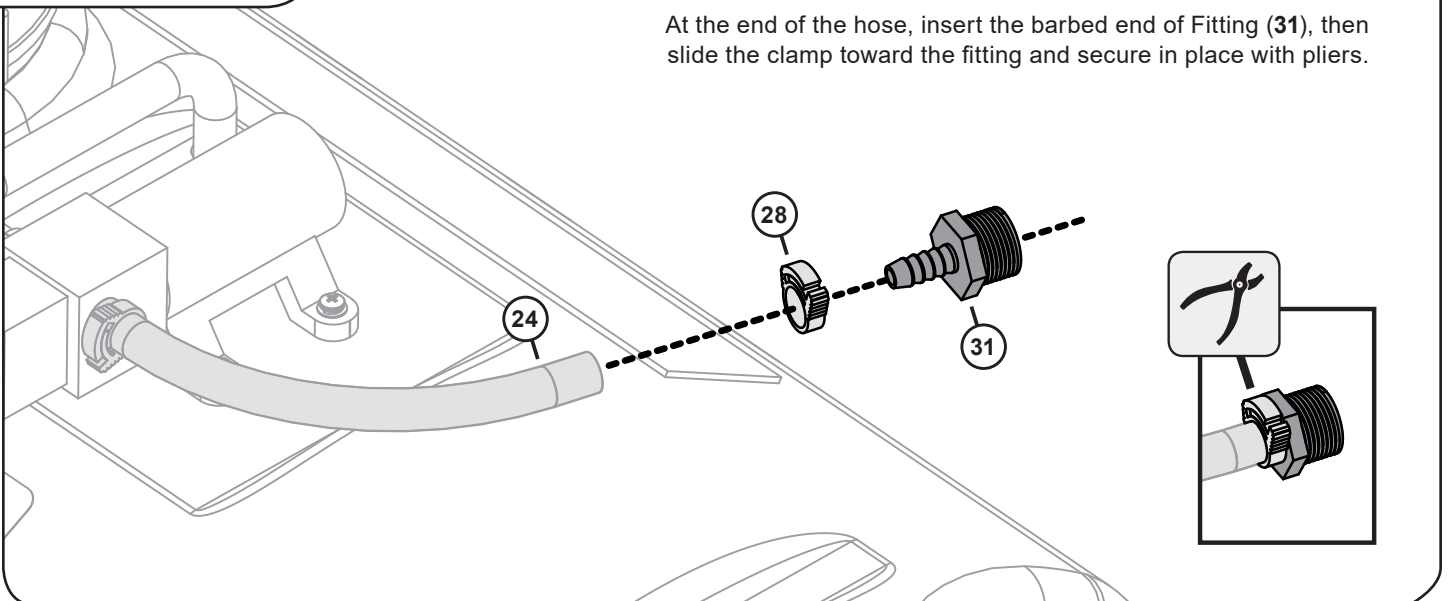
Move the clamp (28) close to the pump (17) and squeeze it, securing in place with pliers.



Assembly Step 13-A

Add a Clamp (28) over the other end of the 8" Hose (24) that was installed on step 12.

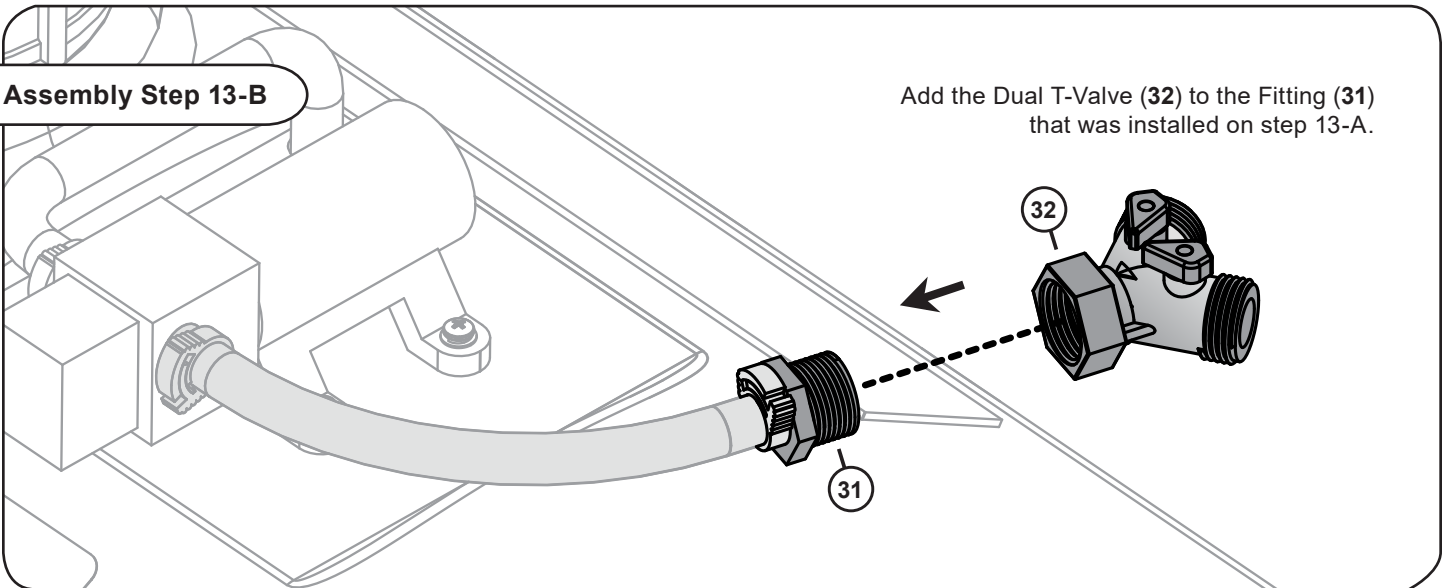
At the end of the hose, insert the barbed end of Fitting (31), then slide the clamp toward the fitting and secure in place with pliers.



ASSEMBLY

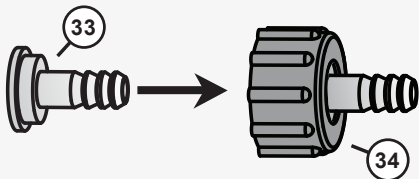
Assembly Step 13-B

Add the Dual T-Valve (32) to the Fitting (31) that was installed on step 13-A.

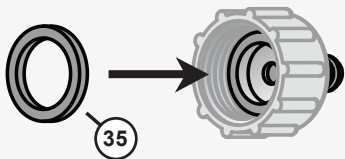


Assembly Step 13-C

Insert a Hose Barb (33) through a Hose Swivel Nut (34).



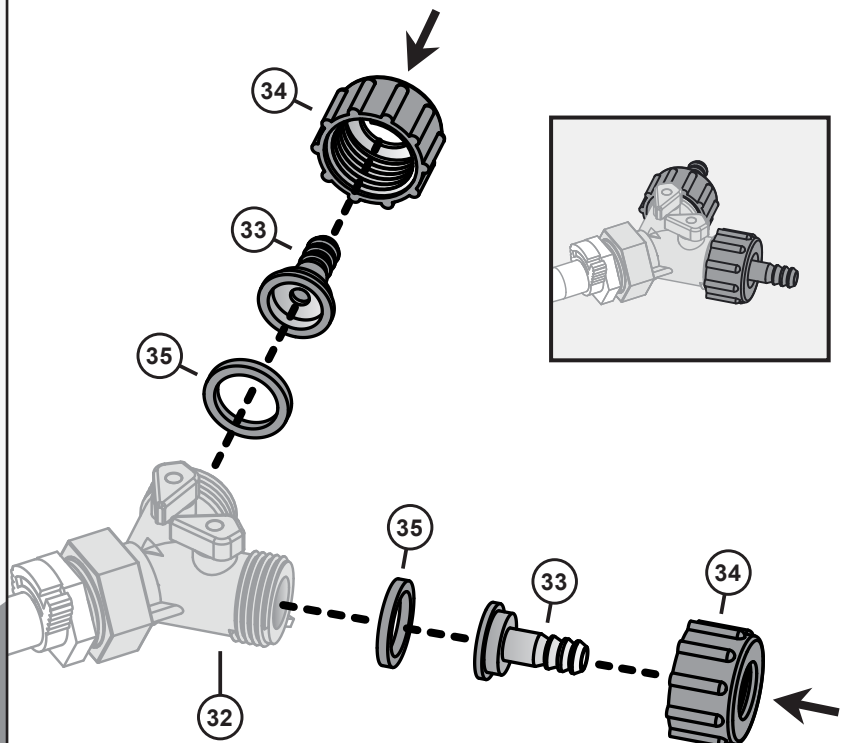
Follow with a 3/4" Vinyl Washer (35).



NOTE: If you are using a tool to insert the washer (35), be careful to not damage the threading inside the swivel nut (34).

x2

Attach the two hose assemblies to the Dual T-Valve (32) as illustrated.



ASSEMBLY

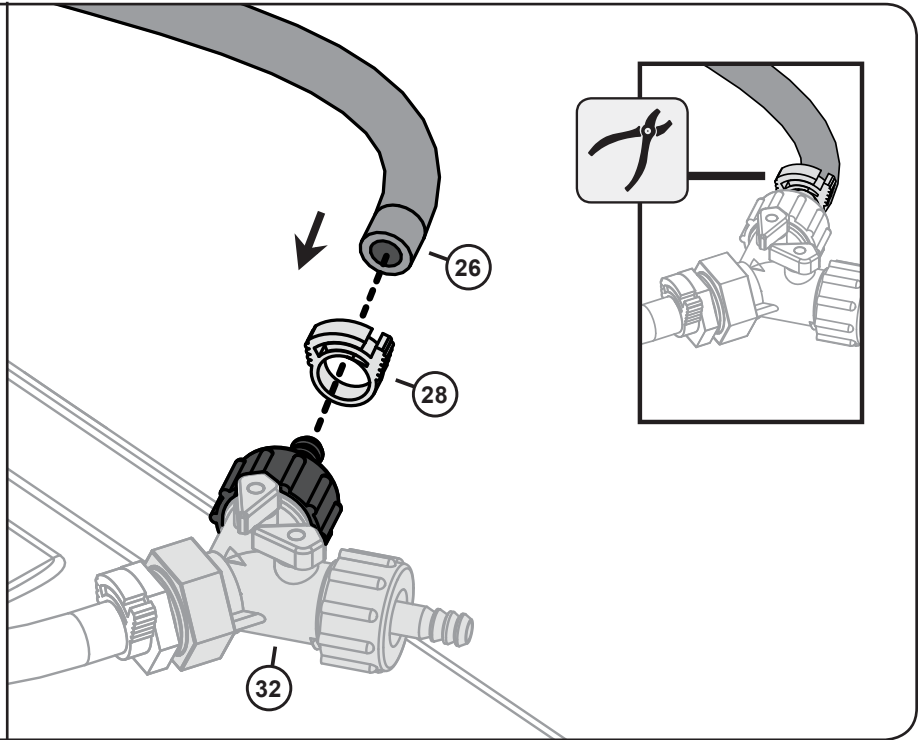
Assembly Step 14-A

Adding the Second 22" Hose

Add a Clamp (28) on the end of a 22" Hose (26).

Connect hose to the LEFT side barb of the Dual T-Valve (32).

Move the clamp (28) close to the Valve (32) and squeeze it, securing in place with pliers.



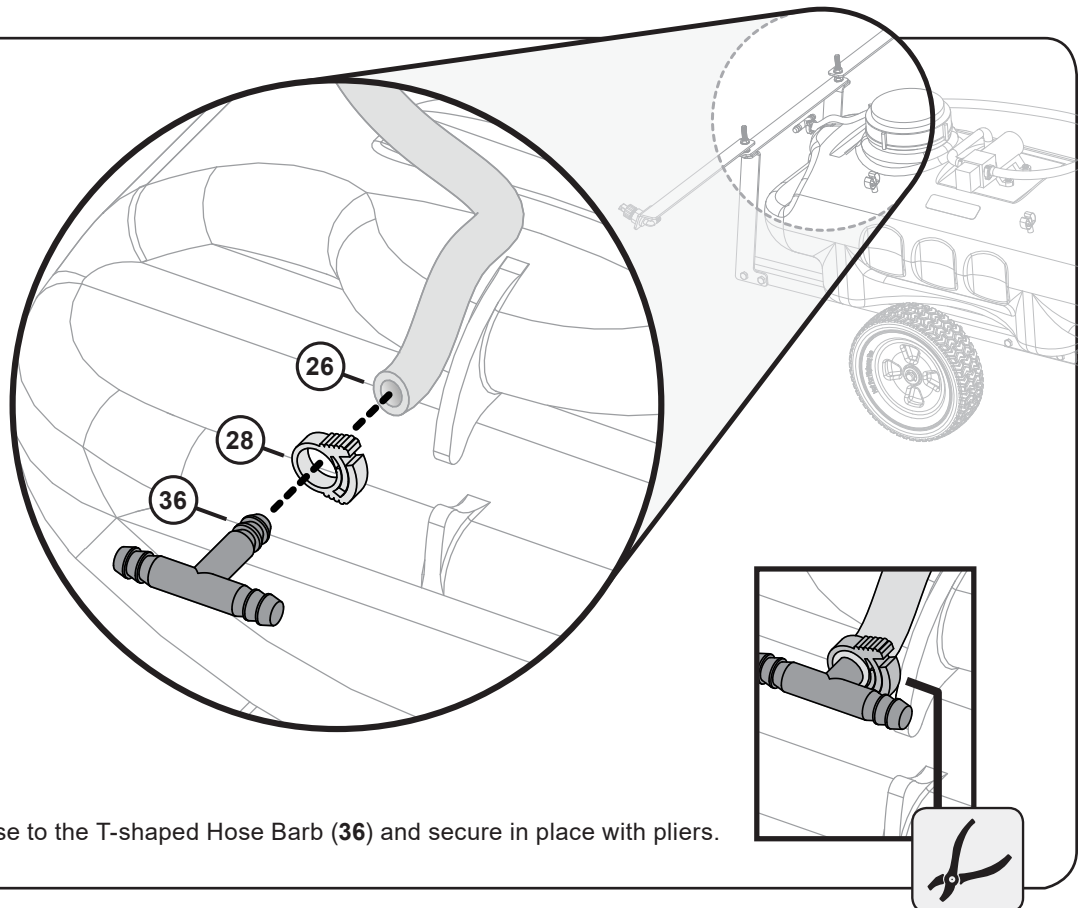
Assembly Step 14-B

Adding the Second 22" Hose

Move the other end of the 22" Hose (26) to the back of the sprayer tank.

Add a Clamp (28) to the end of the hose.

Insert the bottom of the T-shaped Hose Barb (36) into the hose.



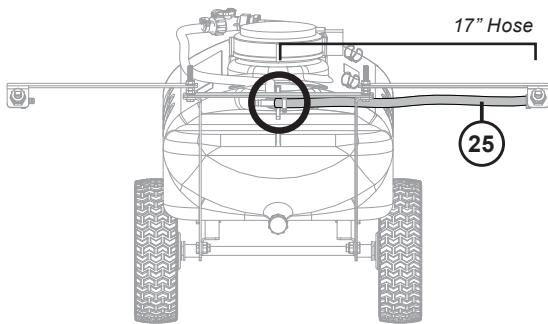
Move the clamp (28) close to the T-shaped Hose Barb (36) and secure in place with pliers.

ASSEMBLY

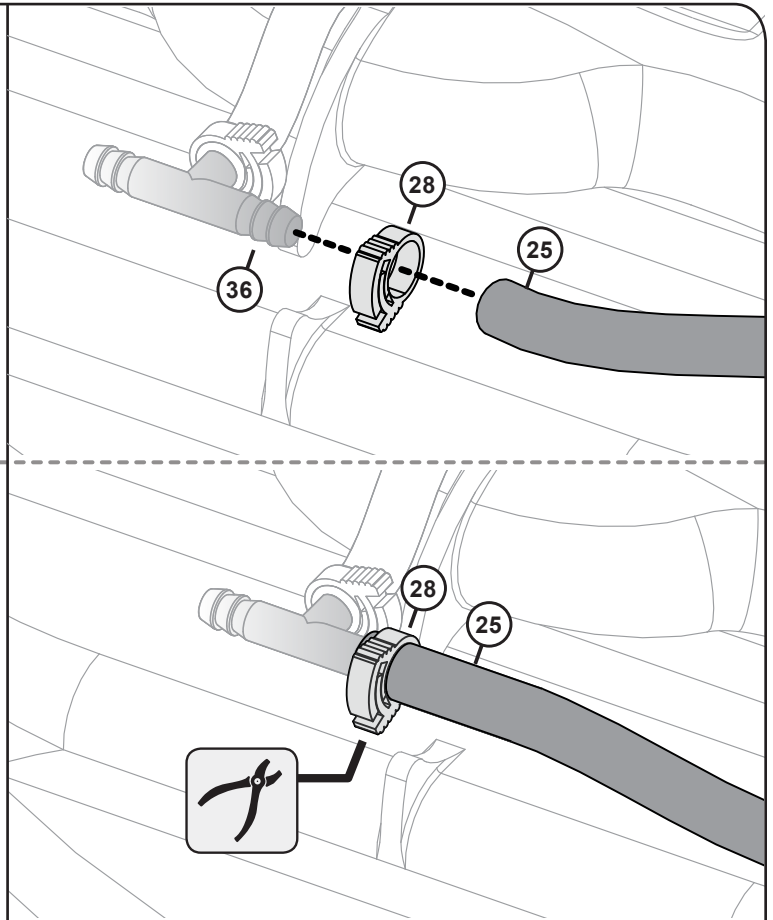
Assembly Step 15

Adding the First 17" Hose

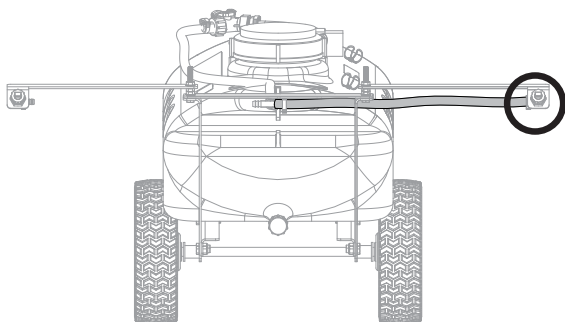
Add a clamp (28) on one end of the first 17" Hose (25), then slide the hose over the RIGHT side barb of the T-shaped extension (36) added on Step 14-B.



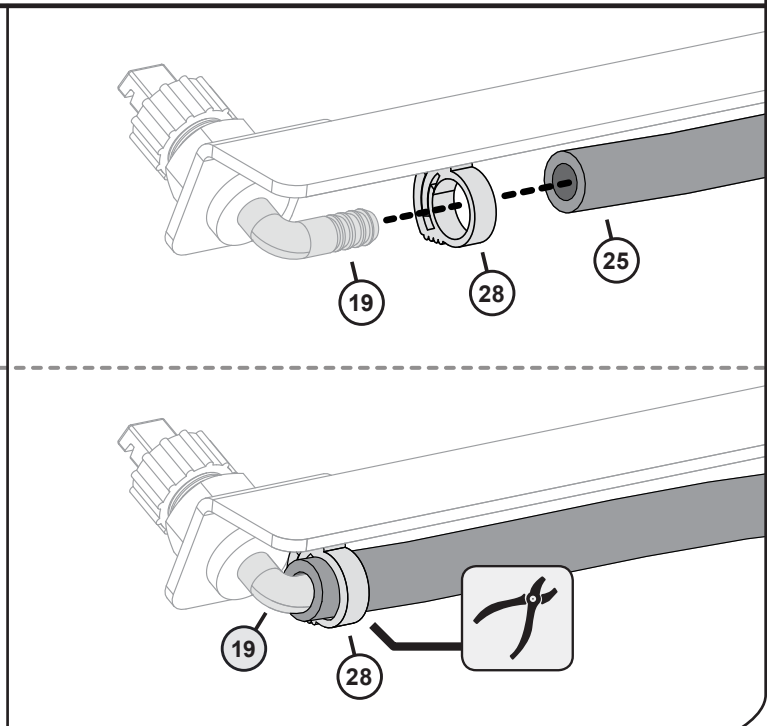
Move the clamp (28) close to the T-Shaped extension (36) and squeeze it, securing in place with pliers.



Add a clamp (28) on the other end of the hose (25), then slide the hose over the 90° Nozzle Body (19) attached to the boom arm as illustrated.



Move the clamp (28) close to the 90° Nozzle Body (19) and squeeze it, securing in place with pliers.

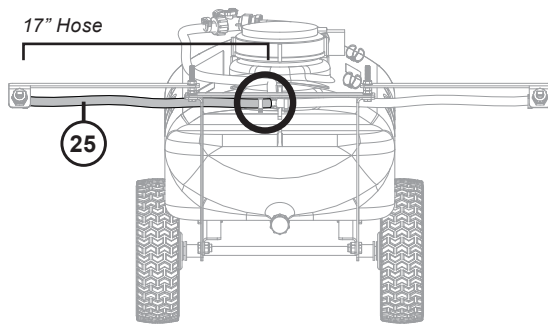


ASSEMBLY

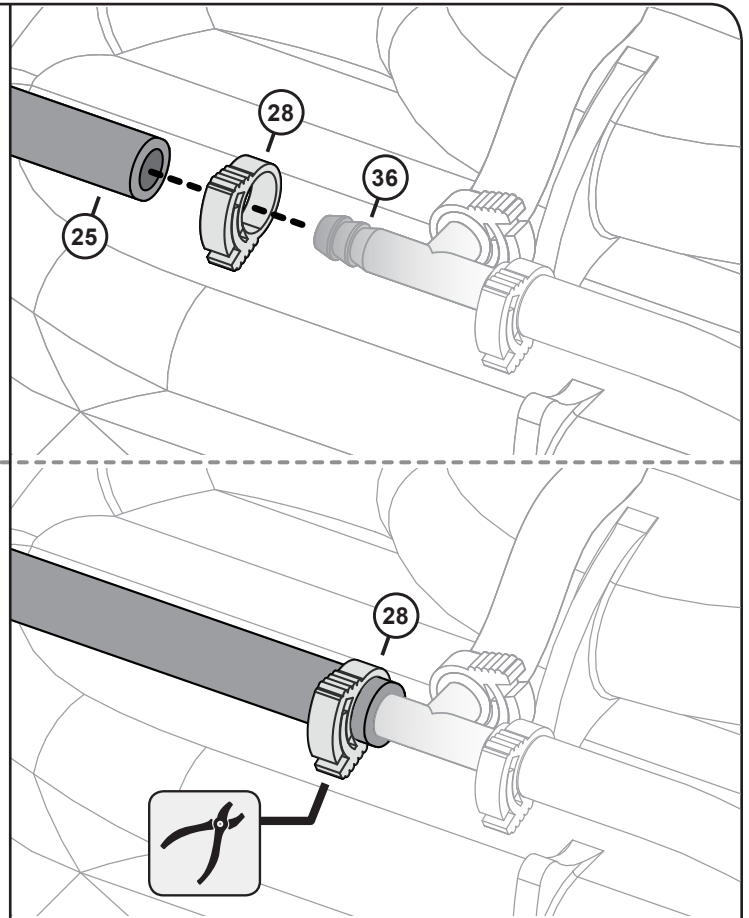
Assembly Step 16

Adding the other 17" Hose

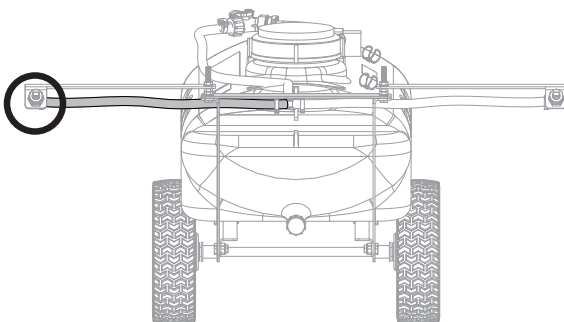
Add a clamp (28) on one end of the other 17" Hose (25), then slide the hose over the LEFT side barb of the T-shaped extension (36) added on Step 14-B.



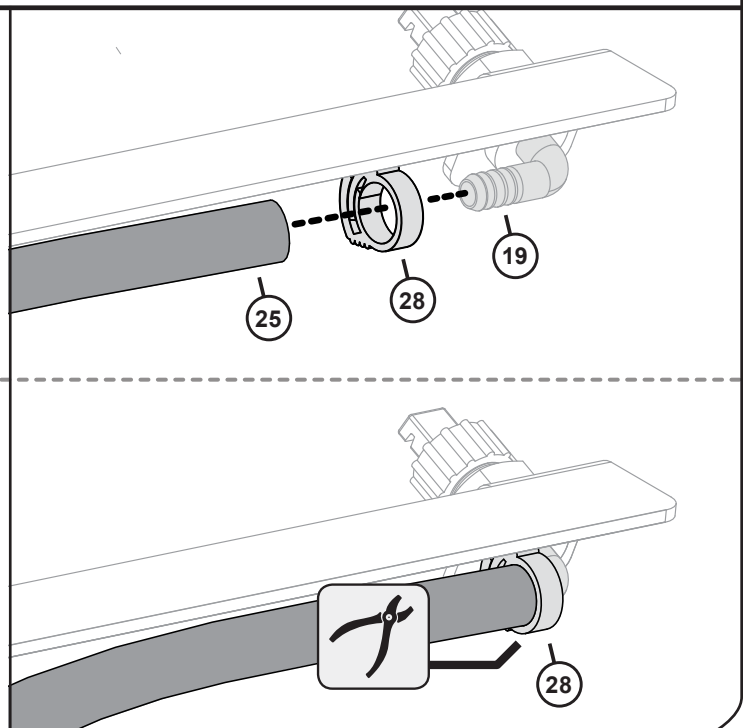
Move the clamp (28) close to the T-Shaped extension (36) and squeeze it, securing in place with pliers.



Add a clamp (28) on the other end of the hose (25), then slide the hose over the 90° Nozzle Body (19) attached to the boom arm as illustrated.



Move the clamp (28) close to the 90° Nozzle Body (19) and squeeze it, securing in place with pliers.



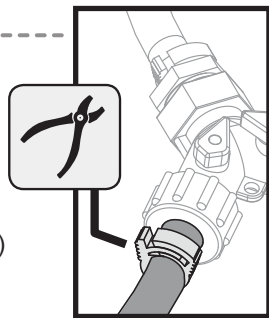
ASSEMBLY

Assembly Step 17-A

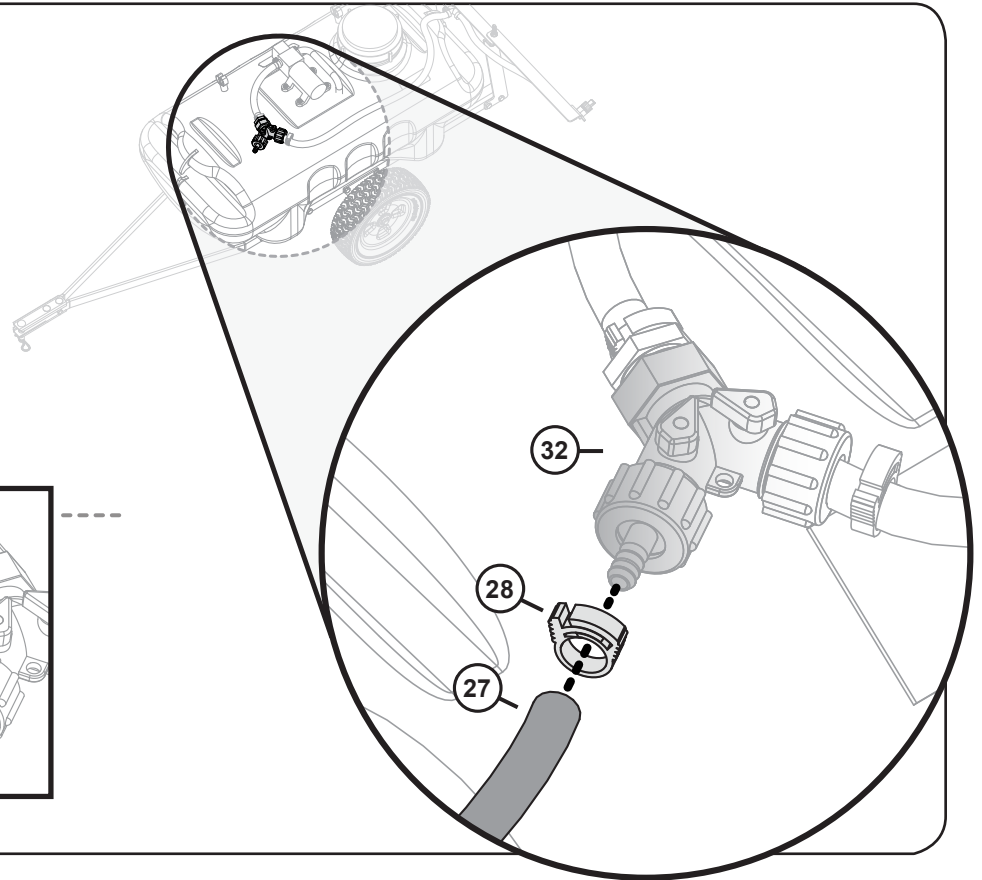
Adding the Longest Hose (12')

Add a Clamp (28) on one end of the 12' Hose (27).

Connect hose to the remaining barb of the Dual T-Valve (32).



Move the Clamp (28) close to the Dual T-Valve (32) and secure in place with pliers.

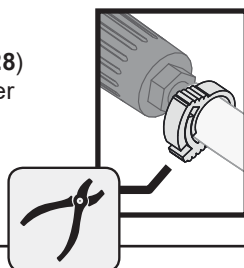


Assembly Step 17-B

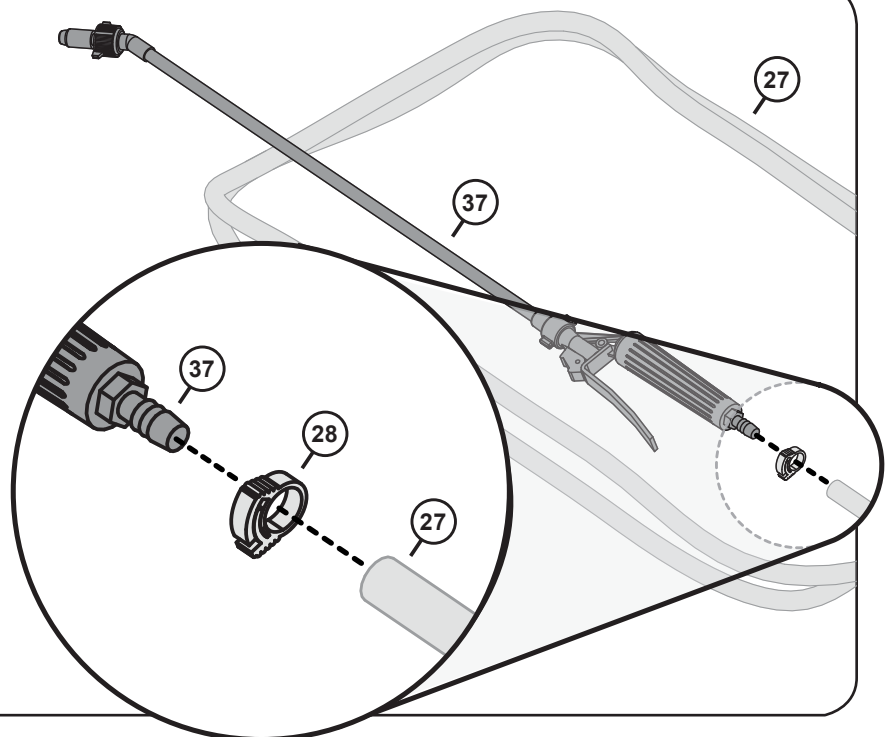
Attaching the Wand

Add a Clamp (28) on the other end of the 12' Hose (27) that was added on Step 17-A.

Connect hose (27) to the barb extending from the handle of the sprayer wand (37).



Move the Clamp (28) close to the Sprayer Wand (37) and secure in place with pliers.



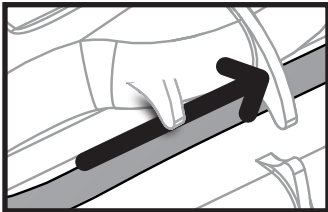
ASSEMBLY

Assembly Step 17-C

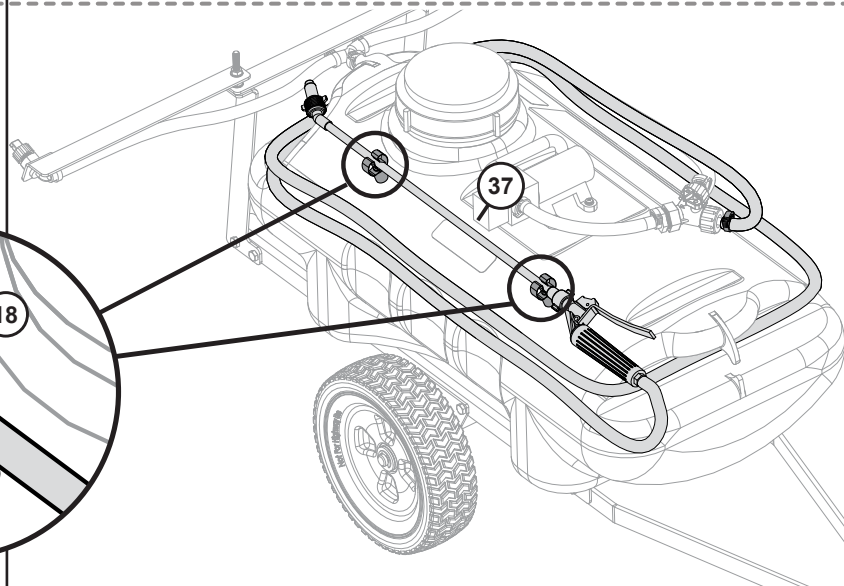
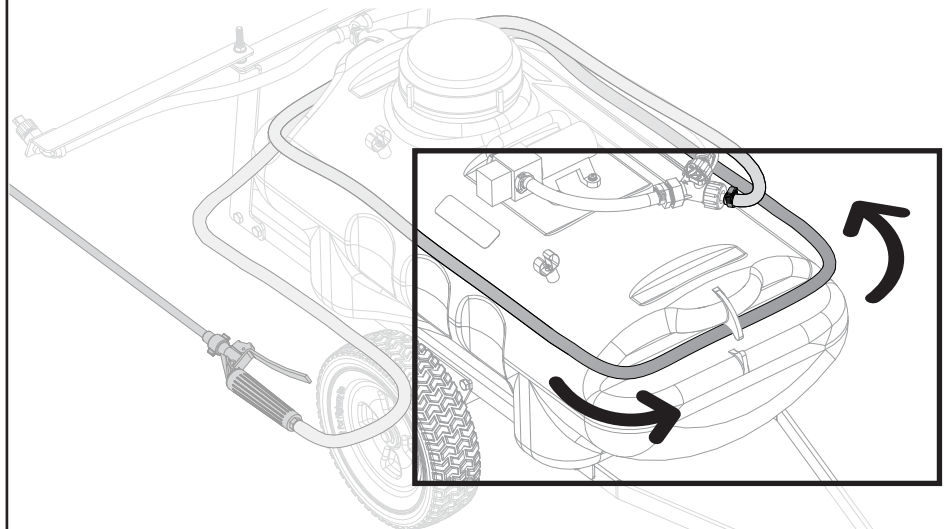
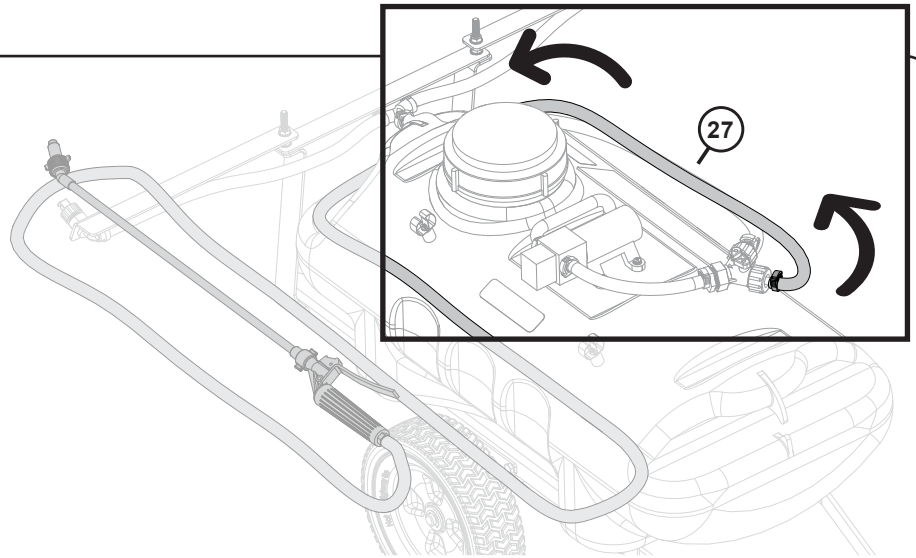
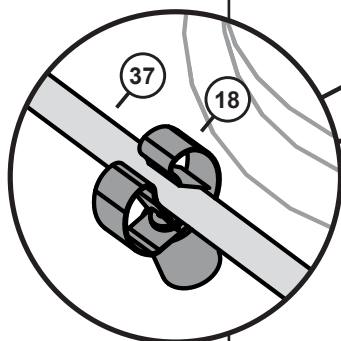
Attaching the Wand

Directing the hose toward the back (between the nozzle brackets and the tank), start wrapping the 12' Hose (27) around the tank (3).

NOTE: At each end of the tank there is a hooked recess where the hose can rest.



Snap the Sprayer Wand (37) in place, utilizing the Wand Brackets (18) that were added on Step 9.



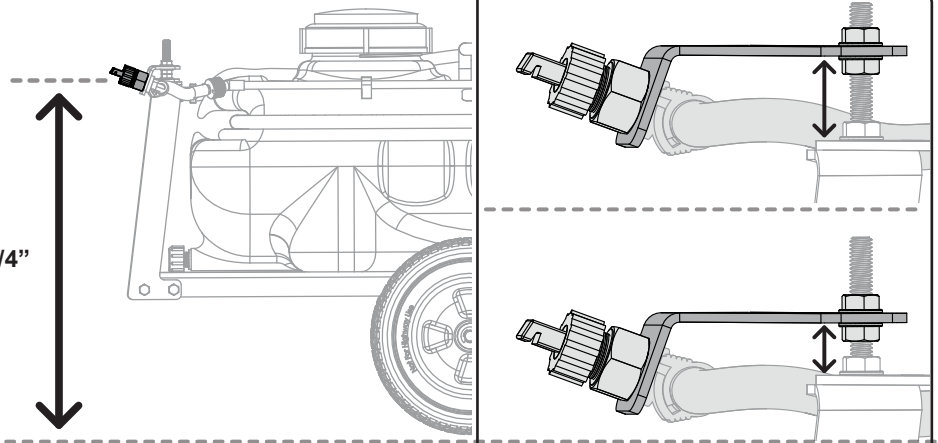
Assembly Step 18

Adjusting the Nozzles

Connect the sprayer to your tractor using the hitch.

Measure and adjust the nozzles to keep a distance of 17 1/4" from the ground.

17 1/4"



CAUTION: AVOID INJURY! Care should be used when working around batteries. Use insulated tools when making battery connections. Heavy gloves & eye protection should be worn when making battery connections.



Assembly Step 19

Installing the Electrical Connections

A. Select the proper tools to remove the leads to the battery terminals. *Note: If you do not have insulated tools, use electrical tape to wrap all exposed non-working surfaces of the tools. It is important to take these steps to reduce the risk of causing an electrical spark.*

B. Put on gloves and eye protection.



C. Verify that the leads are properly attached:



Tractor **RED LEAD** is Attached to the Positive (+) Battery Terminal

and



Tractor **BLACK LEAD** is Attached to the Negative (-) Battery Terminal



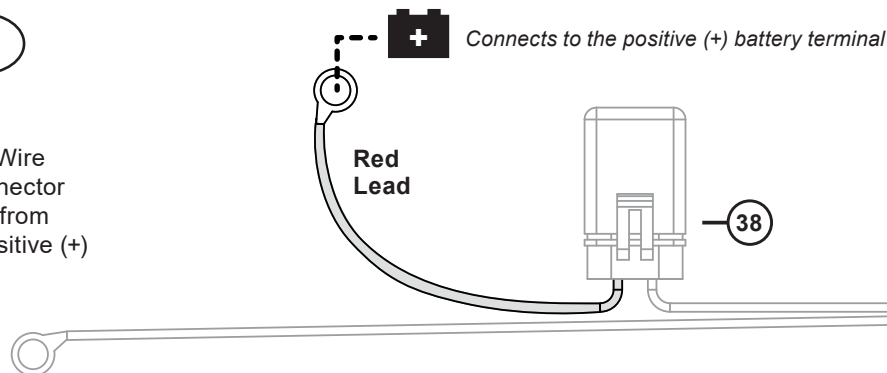
CAUTION: Avoid Injury! Contact with exposed electrical wires can cause sparks that could cause a battery to explode. Make sure all wires connected to the positive terminal of the battery are covered completely to prevent accidental contact with tools or other metal objects.



CAUTION: Avoid Injury! To help prevent electrical spark, install red wire to the positive (+) battery terminal first. Then install black wire to negative (-) battery terminal. To prevent damage to wiring, make sure hood does not close on wires or connectors.

Assembly Step 20-A

Attach the red lead (with the fuse) of the Wire Harness Battery Connector (38) and the red lead from your engine to the positive (+) battery terminal.



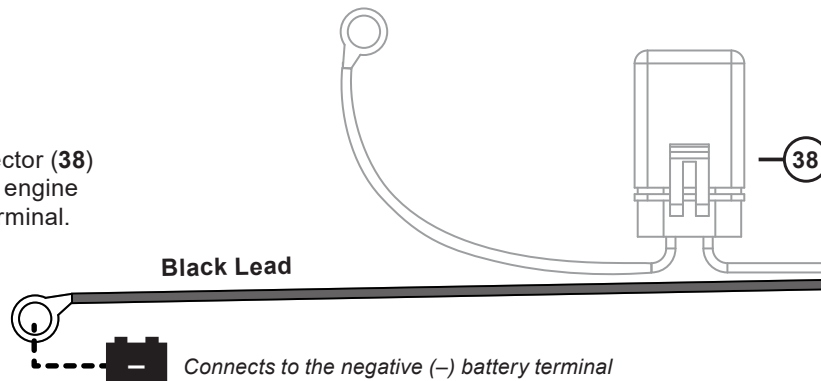
NOTE: Ensure the red battery boot slides back onto positive battery cable post.

ASSEMBLY

Assembly Step 20-B

Attach the black lead of the Wire Harness Battery Connector (38) and the black lead from your engine to the negative (-) battery terminal.

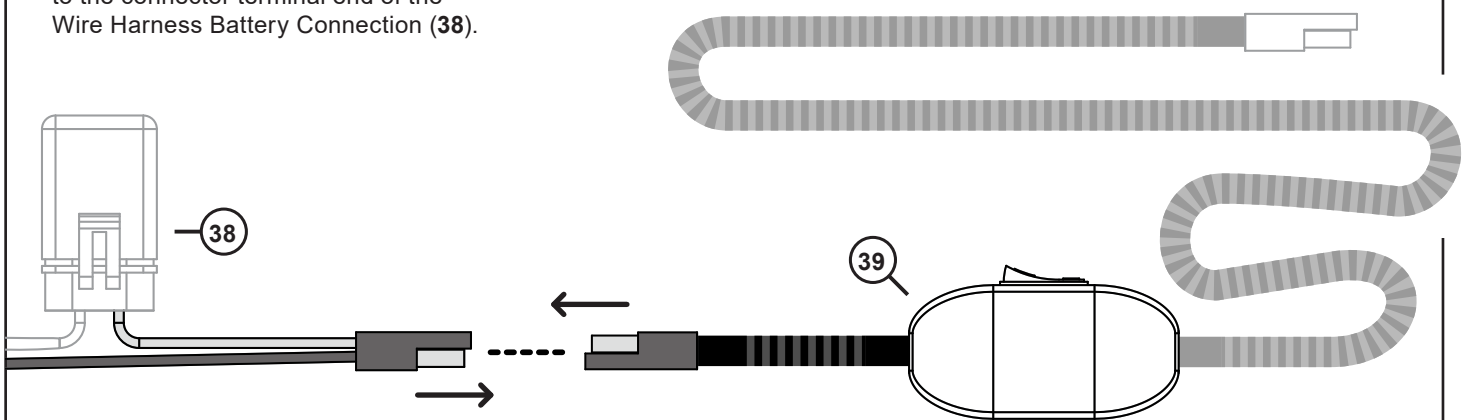
NOTE: Black wire may have a thin red stripe on it.



CAUTION: Avoid Injury! If the battery is underneath the seat, ensure that both battery terminals and battery leads do not make contact with seat.

Assembly Step 21

Attach the Wiring Harness with Switch (39) to the connector terminal end of the Wire Harness Battery Connection (38).



*NOTE: THE WIRING HARNESS WITH SWITCH TERMINAL CONNECTORS CAN BE REVERSED TO SUIT THE NEEDS OF THE USER. In most instances the terminal connector with the **SHORTER LEADS** from the Wiring Harness with Switch are connected to the terminal connector on the Wire Harness Battery Connection, however, most users like the switch to lie in their laps or be convenient to the towing vehicle operator.*

NOTE: Switch wire harness colors do not need to match mating connector wire colors for the pump to function.

ASSEMBLY

CAUTION: Avoid Injury! Care should be used when routing the wiring harness to the sprayer.

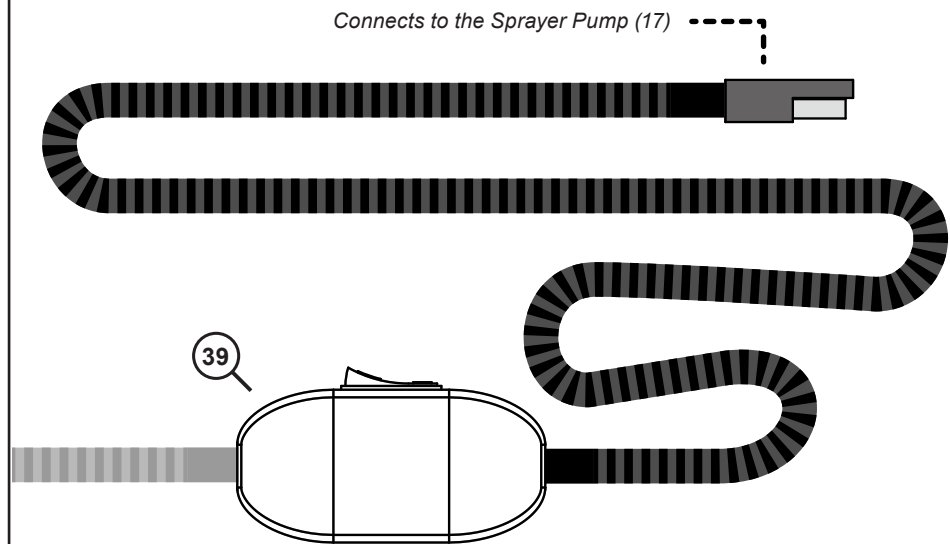


- Do not place the wiring harness in areas that the wires can be pinched or damaged.
- Place the wires to minimize a tripping hazard when getting on or off the towing vehicle.

Assembly Step 22

Attach the other end of remaining terminal lead connector from the Wiring Harness with Switch (39) to the terminal lead connector coming from the pump (17).

If the pump begins to run, use the switch to turn the pump off.



NOTE: THE WIRE HARNESS BATTERY CONNECTOR CAN REMAIN CONNECTED TO THE BATTERY OF THE TOWING VEHICLE WHEN SPRAYING OPERATIONS ARE COMPLETE. *Simply detach the Wiring Harness with Switch terminal connector from the Wiring Harness Battery Connection terminal connector.*

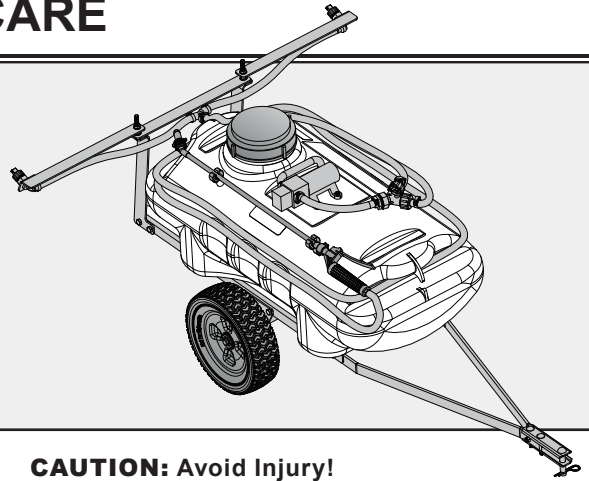


Assembly is complete.

Continue reading for Operation, Service and Maintenance tips.

USE AND CARE

15 GALLON TOW-BEHIND SPRAYER ST-152BH USE AND CARE SECTION



CAUTION: Avoid Injury!

Before installing or removing the sprayer, make sure the towing vehicle is parked safely.

SPECIFICATIONS

Maximum
Speed 5 mph

Tank
Capacity 15 gal

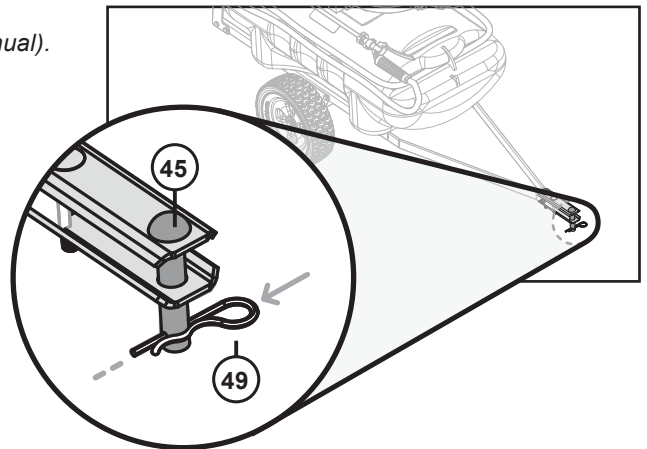
Maximum
Pump Pressure 40 psi

Fuse
(Blade Type) 10 amp

INSTALLING SPRAYER

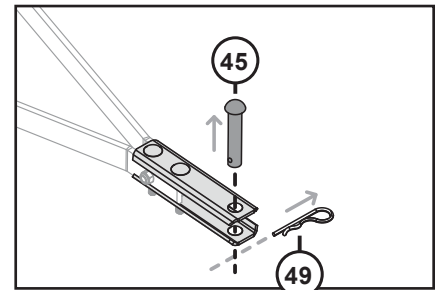
1. Park Machine safely.
(See *Towing Machine manual*).
2. Align sprayer towbar with towing machine hitch.
3. Install Hitch Pin through the sprayer towbar and machine hitch.

Secure the Hitch Pin (45) with Hairpin Cotter (49).

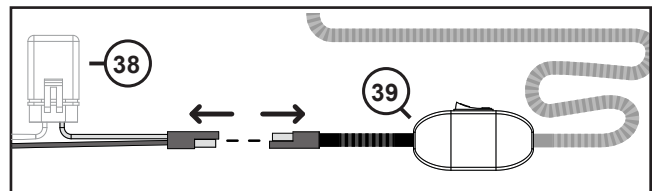


REMOVING SPRAYER

1. Park machine safely.
(See *Towing Machine manual*)
2. Unload sprayer tank before disconnecting from towing machine hitch.
3. Remove the Hairpin Cotter (49) and Hitch Pin (45).



4. Unhook the Wire Harness with Switch (39) from the Wire Harness Battery Connector (38).


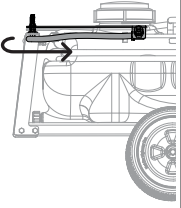
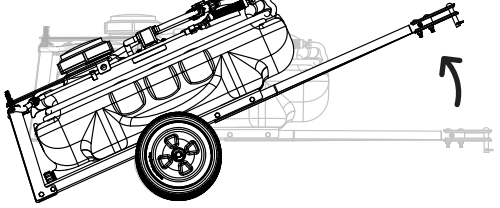
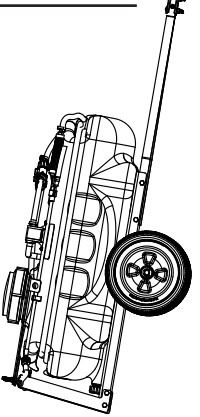


5. Push sprayer away from towing machine.
6. Re-install hitch pin (45) and hairpin cotter (49) through the sprayer towbar.

USE AND CARE

STORING SPRAYER

Sprayer can be stored in a vertical position, significantly reducing the amount of space needed.

<p>1. IMPORTANT: Ensure tank is completely empty of all liquids.</p> 	<p>2. Rotate the boom arms in, toward the sprayer tank.</p> 	<p>3. Lift towbar up, and rotate sprayer onto the rear boom supports.</p> 	<p>4. Allow the sprayer to sit vertical.</p> <p><i>Place against a wall, in a corner of the garage, or any other convenient place for storage.</i></p> 
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PUMP OPERATIONS

The pump motor supplied with your sprayer is a "demand flow" type pump. An internal pressure switch in the pump turns the pump off when the pressure reaches approximately 40psi. When the pump senses that pressure has dropped (by triggering the wand or boom nozzles) the pump will again start and continue to run until 40psi is reached.

NOTE: Pump surge should be avoided. It can cause the pump motor to overheat resulting in damage to the pump. Refer to the Wand Operations Section for tips on how to avoid pump surge.

WAND OPERATIONS



The wand can be used for spraying in various applications from a steady stream to a fine mist. Adjust the spray pattern by turning the Wand Tip clockwise for a fine mist or counterclockwise for a coarse spray.

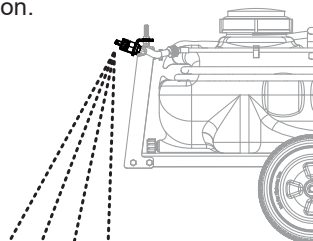


CAUTION: Avoid injury! Always turn pump off when making adjustments to the Wand Tip. Wear eye protection.

BOOM OPERATIONS

BOOM SPRAYING

Normal downward spraying configuration and is controlled by the operator in the seated position.



WAND SPRAYING

For spraying in a vertical orientation such as along fences or hedges, use the wand operation.



USE AND CARE

SPEED CALIBRATION

The speed of the towing machine is critical for an even spray application. Become familiar with the towing machine speed, by measuring off a distance of 50 or 100 feet.

The speed of the vehicle can be calibrated by selecting a gear and throttle position to cover the prescribed distance in the specified time as shown:

Seconds Required to Travel

Speed (mph)	50 feet	100 feet
2	17	34
3	11	22
4	9	17
5	7	14

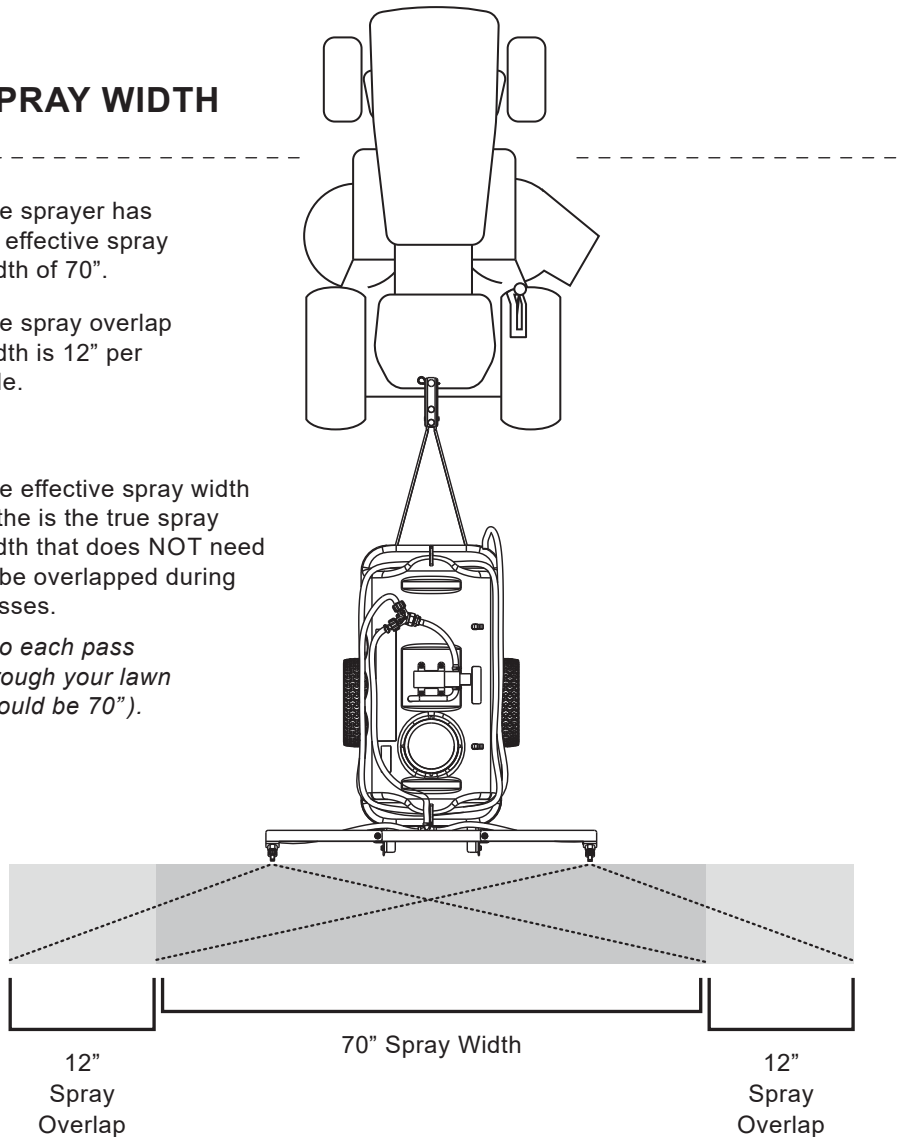
SPRAY WIDTH

The sprayer has an effective spray width of 70".

The spray overlap width is 12" per side.

The effective spray width is the true spray width that does NOT need to be overlapped during passes.

(So each pass through your lawn should be 70").



APPLICATION RATE

This table gives the application rate of the boom nozzles at various speeds. Depending on the number of gallons in the tank, choose a speed that will match the coverage area given on the chemical label.

Chemical labels normally show application rates in gallons per acre or gallons per square feet. Using the following method, one can determine the appropriate amount of water to use and speed to travel to adequately follow the manufacturer's recommended instructions.

Speed (mph)	Application Rate Gallons / 1000 ft ²	Max Area Covered with 15 Gallons / ft ²
2	0.76	19,853
3	0.50	29,779
4	0.38	39,706
5	0.30	49,632

USE AND CARE

APPLICATION RATE, *continued.*

1. SELECT A SPEED

Select a speed and use Table 1 (on page 28) to determine the Application Rate: _____

2. AMOUNT OF WATER

Based on the size of your yard, select the amount of water to be used. Use the formula:

$$\left[\left(\frac{\text{Application Rate (Answer from Step 1)}}{\text{_____}} \right) \times \left(\text{Area (ft}^2\text{) to be Sprayed} \right) \right] = \text{Amount of Water (gallons): _____}$$

3. QUANTITY OF TANKS

$$\left[\frac{\left(\text{Answer Step 2: _____} \right)}{\left(\text{\# of Gallons Needed} \right)} \right] = \text{Number of Tanks Required: _____}$$

15 gallons (Tank Capacity)

4. AMOUNT OF CHEMICALS

Determine how much chemical is to be used from the formula:

$$\left(\frac{\text{Rate from Manufacturer's Label (ounces / 1000 ft}^2\text{)}}{\text{_____}} \right) \times \left(\text{Area to be sprayed (ft}^2\text{)} \right) = \text{Amount of the Chemical Required (ounces) _____}$$

5. AMOUNT OF CHEMICALS PER TANK

$$\left[\frac{\left(\text{Step 4 Answer: _____} \right)}{\left(\text{Amount of Chemical} \right)} \right] = \text{Amount of Chemical (per tank) _____}$$

(Step 3 Answer: _____)
(# of Tanks)

Step 2 Example:

Yard Size = 20,000 ft²
Using Table 1 and the formula to the left.

$$2 \text{ MPH: } \left[\left(\frac{.76 \text{ gal}}{1000 \text{ ft}^2} \right) \times \left(20,000 \text{ ft}^2 \right) \right] = 15.2 \text{ gallons}$$

$$3 \text{ MPH: } \left[\left(\frac{.50 \text{ gal}}{1000 \text{ ft}^2} \right) \times \left(20,000 \text{ ft}^2 \right) \right] = 10 \text{ gallons}$$

$$4 \text{ MPH: } \left[\left(\frac{.38 \text{ gal}}{1000 \text{ ft}^2} \right) \times \left(20,000 \text{ ft}^2 \right) \right] = 7.6 \text{ gallons}$$

$$5 \text{ MPH: } \left[\left(\frac{.30 \text{ gal}}{1000 \text{ ft}^2} \right) \times \left(20,000 \text{ ft}^2 \right) \right] = 6 \text{ gallons}$$

Example:

$$\left(\frac{10 \text{ gal}}{15 \text{ gal}} \right) = 0.67 \text{ tanks}$$

If the number is less than 1.0 = Only 1 fill up is required

Example:

$$\left(\frac{2 \text{ oz}}{1000 \text{ ft}^2} \right) \times \left(20,000 \text{ ft}^2 \right) = 40 \text{ oz}$$

Chemical Label Specifies: 2 ounces / 1000 ft²

Example:

$$\left(\frac{40 \text{ oz}}{1 \text{ tank}} \right) = 40 \text{ ounces per tank}$$

USE AND CARE

DETERMINE WEIGHT FOR SPRAYER

CAUTION: Avoid injury!



Excessive towed load can cause loss of traction and loss of control on slopes. Stopping distance increases with speed and weight of towed load. Total towed weight must not exceed combined weight of pulling machine, ballast and operator.

The following maximum loaded weight capacity is the sprayer loaded with 15 gallons of water.

- **Sprayer Empty Weight** = 35 lbs
- **Maximum Load Capacity** = 125 lbs (15 gallons of water)
- **Sprayer and Maximum Load Capacity Combined Towed Weight** =

$$\begin{array}{r} 35 \text{ lbs (Empty Sprayer)} \\ + 125 \text{ lbs (Maximum Load Capacity)} \\ \hline = 160 \text{ lbs} \end{array}$$

CAUTION: Avoid injury!



If additional weight is required when towing, add weight at or forward of the rear wheels. Adding weight behind the rear wheels can affect machine steering. Refer to your towing machine manual.

Towing capacity will vary with weight of towing machine and operator.

Example:

$$\begin{array}{r} \text{If towing machine weighs:} \quad 400 \text{ lbs} \\ + \text{Operators Weight:} \quad 200 \text{ lbs} \\ \hline \end{array}$$

$$\text{Combined weight total:} \quad 600 \text{ lbs}$$

To maintain stability using the machine in this example, you cannot safely tow more than 600 lbs without first adding additional ballast to the towing machine.

MAINTENANCE TIPS



- The key to years of trouble-free service is to keep your sprayer clean and dry.
- Never allow material to remain in tank for extended periods of time.
- Should rust develop, sand lightly and then paint area with enamel.
- Periodically check all fasteners for tightness.
- Rinse / dry inside and outside of sprayer after each use.

CLEAN AFTER EACH USE

IMPORTANT: Always empty and clean the sprayer immediately after each use. Failure to do so may cause the chemicals to dry or thicken in the lines, clogging the pump and other components.

TO PROPERLY CLEAN THE SPRAY SYSTEM:

1. Drive vehicle to a designated cleaning area (a driveway or easy-to-clean surface).
2. Use three separate rinses.
3. Use a minimum of 2 gallons (7.6 L) for each rinse.
4. Use the cleaners and neutralizers as recommended by the chemical manufacturers.
5. Use pure clean water (no cleaners or neutralizers) for the last rinse.

CHEMICAL DISPOSAL



IMPROPER CHEMICAL WASTE DISPOSAL CAN POLLUTE THE ENVIRONMENT AND CAUSE HEALTH ISSUES.



Follow the disposal directions on the chemical manufacturer's label. Dispose of chemicals and containers in accordance to local / state / federal laws.

USE AND CARE

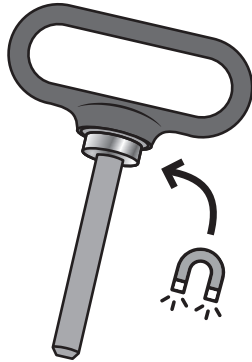
OPTIONAL ACCESSORIES

MAGNETIC HITCH PIN MHPK-12BH

This quick-connect magnetic hitch pin can replace a regular cotter pin for an extra-strong, convenient upgrade.



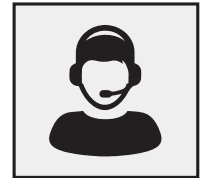
- Diameter: 1/2"
- Pin Length: 3"



NOTE:

Additional accessories are also available in our Parts Store online: shop.brinly.com

SERVICE



QUALITY CONTINUES WITH QUALITY SERVICE

If you have installation questions, are missing parts or need replacement parts, don't go back to the store!

Please find your product serial number and model number, then contact our Customer Service department:



In North America and Canada call
Toll-Free: **877-728-8224**



Chat online: www.brinly.com



Email: customerservice@brinly.com

ONLINE

BRINLY.COM

Additional info and videos are available on our website. Please visit the URL above OR scan this QR code.

ST-152BH



NOTES



MANUFACTURER'S LIMITED WARRANTY
SPRAYERS

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) and Canada.

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 Operator'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.

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 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 & filters.
- b. Normal deterioration of 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 Co. 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. **NOTE:** *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.*

This limited warranty lasts as long you own your product purchased from an authorized seller. **Coverage terminates once you sell or otherwise transfer the product.**

This limited warranty does not cover any purchaser other than the original purchaser of the product, nor does it cover any product purchased from an unauthorized third-party. If you are not the original purchaser of this product, your product is not covered by our limited warranty and you take the product "AS IS" and "with all faults."

We may require proof of purchase from you demonstrating that you are the original purchaser of the product, purchased the product from an authorized dealer, and are eligible to make a valid claim under this limited warranty.

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. All parts replaced under warranty will be considered as part of the original product, and any warranty on the replaced parts will expire coincident with the original product warranty.

WARRANTY PERIOD:

See applicable parts listed below.

Standard / Residential Use:

- Steel Frame & Steel Parts 2 years
- Tank 2 years
- Tires / Wheels 90 days

All other normal wear parts or component failures will be covered on this product for a period of 90 days.

If this equipment is being used in a commercial application and / or for multiple properties, the warranty is 90 days after purchase for all parts.