



*Doing Our Best to Provide You the Best*

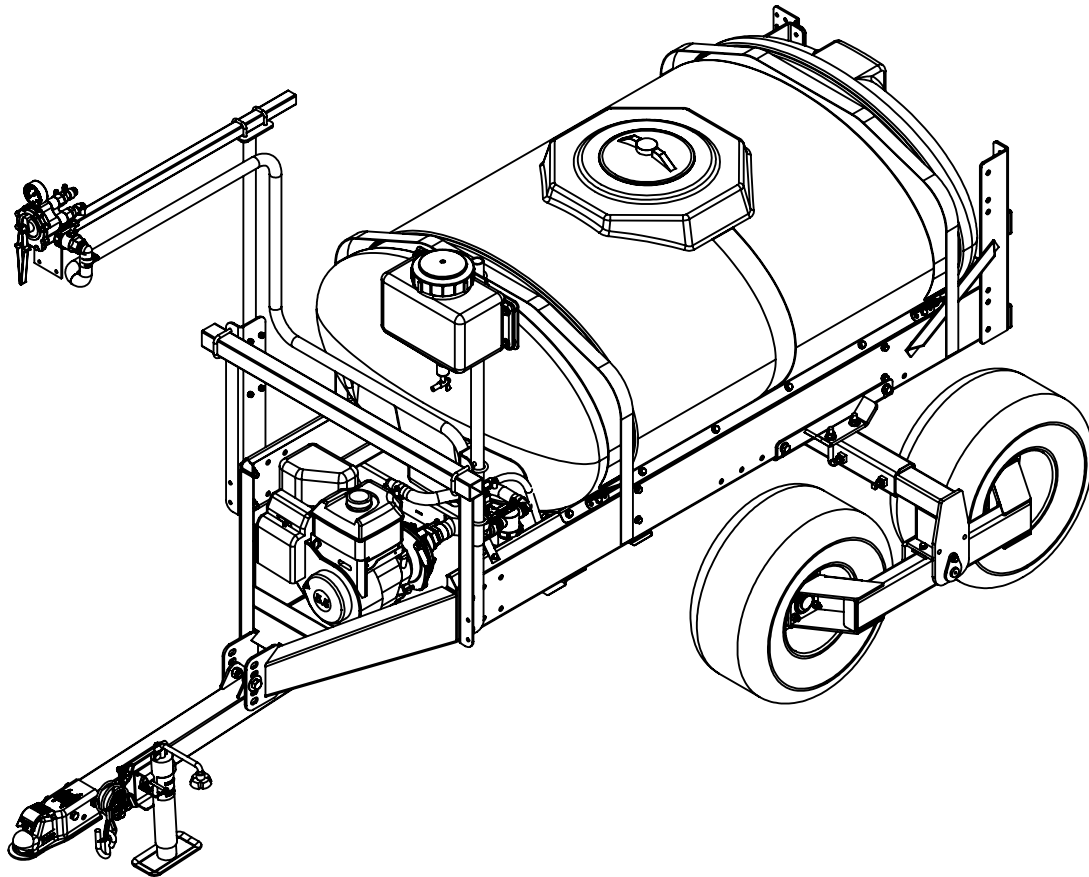
AS20029, Rev 2  
12/22

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## **ATV SPRAYER**

### **150 & 200 GAL**

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**OPERATOR MANUAL**

Introduction

Thank you for purchasing a Demco sprayer. We feel you have made a wise choice and hope you are completely satisfied with your new sprayer. If you have any questions regarding the applications of certain solutions or chemicals, contact your chemical supplier and follow chemical manufacturer recommendations as well as all licensing and use restrictions or regulations.

WARRANTY POLICY, OPERATOR MANUALS, PARTS MANUALS & REGISTRATION

Go online to [www.demco-products.com](http://www.demco-products.com) to review Demco warranty policies, operator manuals and register your Demco product.



**WARNING: TO AVOID PERSONAL INJURY OR DEATH, OBSERVE FOLLOWING INSTRUCTIONS:**

- Chemicals are dangerous. Know exactly what you’re going to do and what is going to happen before attempting to work with these products. Improper selection or use can injure people, animals, plants and soil.
- Always wear protective clothing such as coveralls, goggles and gloves when working with chemicals or sprayer.
- Be sure to dispose of all unused chemicals or solutions in a proper and ecologically sound manner.

GENERAL INFORMATION

- 1. Unless otherwise specified, high-strength (grade5) (3 radial-line head markings) hex head bolts are used throughout assembly of this sprayer.
- 2. Whenever terms “LEFT” and “RIGHT” are used in this manual it means from a position behind sprayer and facing forward.
- 3. When placing a parts order, refer to this manual for proper part numbers and place order by **PART NO. and DESCRIPTION.**

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**TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH!**



**THIS SYMBOL MEANS**

**ATTENTION**

**BECOME ALERT**

**YOUR SAFETY IS INVOLVED!**

**SIGNAL WORDS:**

This manual uses the following signal words--**DANGER**, **WARNING**, and **CAUTION**-- with safety messages. The appropriate signal word has been selected using the following guidelines.

**DANGER:**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

**WARNING:**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

**CAUTION:**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

If you have questions not answered in this manual, require additional copies, or if your manual is damaged, please contact your dealer or DEMCO, 4010 320th Street, Boyden, IA 51234  
ph: (712) 725-2311 or Toll Free: 1-800-543-3626 Fax: (712) 725-2380 or 1-800-845-6420  
<http://www.demco-products.com>



# SAFETY...YOU CAN LIVE WITH IT



## EQUIPMENT SAFETY GUIDELINES

Every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or you yourself, follow them.

In order to provide a better view, certain illustrations in your owners manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace shield prior to use.

Replace any caution, warning, danger or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

Do not attempt to operate this sprayer under the influence of alcohol or drugs.

Review safety instructions with all users annually.

Operator should be a responsible adult. **DO NOT ALLOW PERSONS TO OPERATE OR ASSEMBLE THIS UNIT UNTIL THEY HAVE DEVELOPED A THOROUGH UNDERSTANDING OF SAFETY PRECAUTIONS AND HOW IT WORKS.**

To prevent injury or death, use a tractor equipped with a roll over protective system (ROPS). Do not paint over, remove, or deface any safety signs or warning decals on your sprayer. Observe all safety signs and practice instructions on them.

Never exceed limits of sprayer. If its ability to do a job, or to do so safely is in question **DON'T TRY IT.**



## LIGHTING AND MARKING

It is the responsibility of operator to know lighting and marking requirements of local highway authorities and to install and maintain equipment to provide compliance with regulations. Add extra lights when transporting at night or during periods of limited visibility.

Lighting kits are available from your dealer or from manufacturer.



## SAFETY SIGN CARE

- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replacement parts that displayed a safety sign should also display current sign.
- Safety signs are available from your distributor, dealer parts department, or factory.

### How to install safety signs:

- Be sure that installation area is clean and dry.
- Decide on exact position before you remove backing paper.
- Remove smallest portion of split backing paper.
- Align decal over specified area and carefully press small portion with exposed sticky backing in place.
- Slowly peel back remaining paper and carefully smooth remaining portion of decal into place.
- Small air pockets can be pierced with a pin and smoothed out using piece of decal backing paper.

**TIRE SAFETY**

- Failure to follow proper procedures when mounting a tire on a rim can produce an explosion which may result in a serious injury or death.
- Do not attempt to mount a tire unless you have proper equipment and experience to do job.
- Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service and/or mount tires.
- Always order and install tires and wheels with appropriate type and load capacity to meet or exceed anticipated weight to be placed on sprayer.

**REMEMBER**

Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact your local authorized dealer or manufacturer.

**BEFORE OPERATION:**

- Carefully study and understand this manual.
- Do not wear loose-fitting clothing which may catch in moving parts.
- Always wear protective clothing and substantial shoes.
- It is recommended that suitable protective hearing and eye protection be worn.
- Operator may come in contact with certain materials which may require specific safety equipment relative to handling of such materials. (Examples: extreme dust, molds, fungus, bulk fertilizers, etc.)
- Keep wheel and lug nuts tightened to specified torque.
- Assure that agricultural implement tires are inflated evenly.
- Give sprayer a visual inspection for any loose bolts, worn parts, or cracked welds, and make necessary repairs. Follow maintenance safety instructions included in this manual.
- Be sure there are no tools lying on or in equipment.
- Do not use sprayer until you are sure that area is clear, especially around children and animals.
- Don't hurry learning process or take sprayer for granted. Ease into it and become familiar with your new equipment.
- Practice operation of your sprayer and its attachments. Completely familiarize yourself and other operators with its operation before using.
- Use a tractor equipped with Roll Over Protection System (ROPS) and fasten your seat belt prior to starting the engine.
- Manufacturer does not recommend usage of a tractor with the ROPS removed.
- Move tractor wheels to widest recommended settings to increase stability.
- Do not allow anyone to stand between tongue or hitch and towing vehicle when backing up to equipment.



### DURING OPERATION

- Beware of bystanders, **PARTICULARLY CHILDREN!** Always look around to make sure that it is safe to start engine of towing vehicle or move unit. This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.
- **NO PASSENGERS ALLOWED** - Do not carry passengers anywhere on or in tractor or sprayer.
- Keep hands and clothing clear of moving parts.
- Do not clean, lubricate, or adjust your sprayer while it is moving.
- When halting operation, even periodically, set tractor or towing vehicles brakes, disengage PTO, shut off engine, and **remove ignition key**.
- Pick the most level possible route when transporting across fields. Avoid edges of ditches, gullies, and steep hillsides.
- Be extra careful when working on inclines.
- Periodically clear equipment of brush, twigs or other materials to prevent buildup of dry combustible materials.
- Maneuver tractor or towing vehicle at safe speeds.
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- Avoid loose gravel, rocks, and holes; they can be dangerous for equipment operation or movement.
- Allow for sprayer length when making turns.
- Do not walk or work under raised components or attachments unless securely positioned and blocked.
- Keep all bystanders, pets, and livestock clear of work area.
- Operate towing vehicle from operators seat only.
- Never stand alongside of unit with engine running or attempt to start engine and/or operate machine while standing alongside of unit.
- Never leave running equipment unattended.
- As a precaution, always recheck hardware on equipment following every 100 hours of operation. Correct all problems. Follow maintenance safety procedures.



### FOLLOWING OPERATION

- Following operation, or when unhitching, stop tractor or towing unit, set brakes, disengage PTO and all power drives, shut off engine and **remove ignition key**.
- Store sprayer in an area away from human activity.
- Do not park sprayer where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.
- Do not permit children to play on or around stored sprayer.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.
- Wheel chocks may be needed to prevent unit from rolling.



## HIGHWAY AND TRANSPORT OPERATIONS

- **SAFETY CHAINS:** If equipment is going to be transported on a public highway, always follow state and local regulations regarding safety chains and auxiliary lighting. Be sure to check with local law enforcement agencies for your own particular regulations. If required, safety chains should be obtained and installed. Only safety chains (not elastic or nylon/plastic tow straps) should be used to retain connection between towing and towed machines in event of separation of primary attaching system. Use a high strength, appropriately sized hitch pin with a mechanical retainer and attach safety chains. Secure safety chain to draw bar cage, mounting loops, or bumper frame. Replace the safety chain if it becomes damaged or stretched.
- Adopt safe driving practices:
  - Keep brake pedals latched together at all times. **NEVER USE INDEPENDENT BRAKING WITH MACHINE IN TOW, LOSS OF CONTROL AND/OR UPSET OF UNIT CAN RESULT.**
  - Always drive at a safe speed relative to local conditions, ensure that your speed is low enough for an emergency stop. Keep speed to a minimum.
  - Reduce speed prior to turns to avoid risk of overturning.
  - Always keep tractor or towing vehicle in gear to provide engine braking when going downhill. Do not coast.
  - Do not drink and drive!
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- Use approved accessory lighting, flags and necessary warning devices to protect yourself and operators of other vehicles on highway during transport. Various safety lights and devices are available from your dealer.
- Use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- When driving tractor and sprayer on road under 20 m.p.h. (40 kph) at night or during day, use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.
- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- Be observant of bridge load ratings. Do not cross bridges rated lower than gross weight at which you are operating.
- Watch for obstructions overhead and side to side while transporting.
- Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of equipment when making turns, stopping unit, etc.



## PERFORMING MAINTENANCE

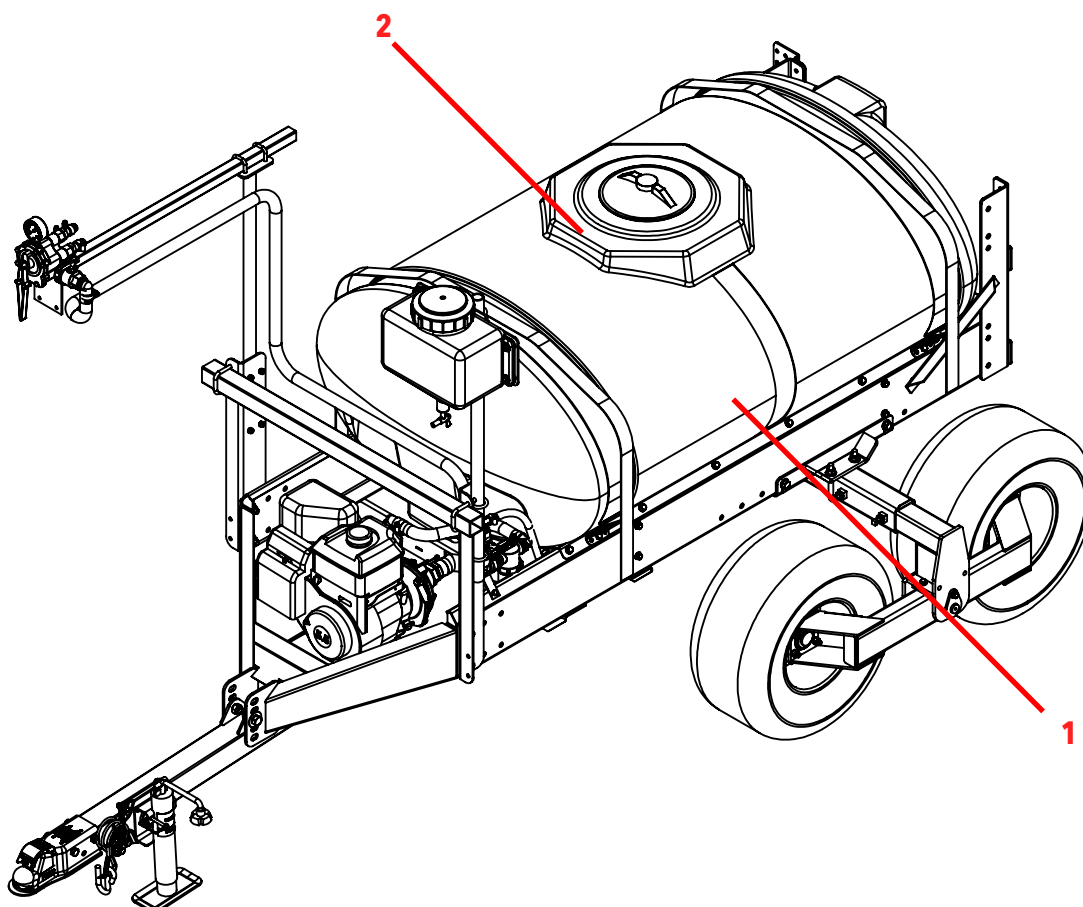
- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Make sure there is plenty of ventilation. Never operate engine of towing vehicle in a closed building. Exhaust fumes may cause asphyxiation.
- Before working on this machine, stop towing vehicle, set brakes, disengage PTO and all power drives, shut off engine and **remove ignition key.**
- Be certain all moving parts and attachments have come to a complete stop before attempting to perform maintenance.
- Always use safety support and block wheels. Never use a jack to support machine.
- Always use proper tools or equipment for job at hand.
- Use extreme caution when making adjustments.
- Follow torque chart in this manual when tightening bolts and nuts.

- Never use your hands to locate a hydraulic leak on attachments. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate skin.
- Openings in skin and minor cuts are susceptible to infection from hydraulic fluid. **Without immediate medical treatment, serious infection and reactions can occur.**
- When disconnecting hydraulic lines, shut off hydraulic supply and relieve all hydraulic pressure.
- Replace all **shields** and **guards** after servicing and before moving.
- After servicing, be sure all tools, parts and service equipment are removed.
- Do not allow grease or oil to build up on any steps or platform.
- When replacing bolts, refer to owners manual.
- Refer to bolt torque chart for head identification marking.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. Manufacturer will not claim responsibility for use of unapproved parts or accessories and other damages as a result of their use.
- If equipment has been altered in any way from original design, manufacturer does not accept any liability for injury or warranty.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment.



## SAFETY SIGN LOCATIONS

Types of safety sign and locations on equipment are shown in illustration below. Good safety requires that you familiarize yourself with various safety signs, type of warning, and area or particular function related to that area, that requires your SAFETY AWARENESS.



ITEM	PART#	DESCRIPTION	QTY
1	AA21018	DEMCO DECAL	2
2	AB21014	WARNING DECAL	1
Please order replacement parts by PART NO. and DESCRIPTION			

1.

# DEMCO

2.

## WARNING

**To prevent serious injury or death**

- Refer to chemical supplier and manufacturer recommendations and all licensing restrictions or regulations.
- Always wear recommended protective clothing when working with chemicals or sprayer.
- Dispose of all unused chemicals or solutions in proper and ecologically sound manner. Improper use can injure people, animals, plants and soil.

REV 1
AB21014



## TORQUE SPECIFICATION

Torque figures indicated are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

\* GRADE or CLASS value for bolts and capscrews are identified by their head markings.

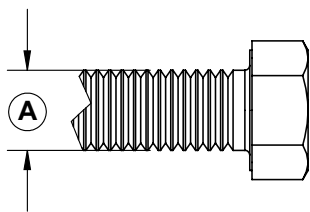
## BOLT TORQUE DATA FOR STANDARD NUTS, BOLTS, AND CAPSCREWS.

Tighten all bolts to torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt chart as guide. Replace hardware with same grade bolt.

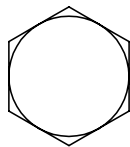
NOTE: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.

Bolt Torque for Standard bolts *						
"A"	GRADE 2		GRADE 5		GRADE 8	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
1/4"	6	(8)	9	(12)	12	(16)
5/16"	10	(13)	18	(25)	25	(35)
3/8"	20	(27)	30	(40)	45	(60)
7/16"	30	(40)	50	(70)	80	(110)
1/2"	45	(60)	75	(100)	115	(155)
9/16"	70	(95)	115	(155)	165	(220)
5/8"	95	(130)	150	(200)	225	(300)
3/4"	165	(225)	290	(390)	400	(540)
7/8"	170	(230)	420	(570)	650	(880)
1"	225	(300)	630	(850)	970	(1310)

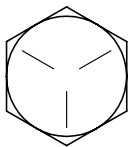
Bolt Torque for Metric bolts *						
"A"	CLASS 8.8		CLASS 9.8		CLASS 10.9	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
6	9	(13)	10	(14)	13	(17)
7	15	(21)	18	(24)	21	(29)
8	23	(31)	25	(34)	31	(42)
10	45	(61)	50	(68)	61	(83)
12	78	(106)	88	(118)	106	(144)
14	125	(169)	140	(189)	170	(230)
16	194	(263)	216	(293)	263	(357)
18	268	(363)	--	--	364	(493)
20	378	(513)	--	--	515	(689)
22	516	(699)	--	--	702	(952)
24	654	(886)	--	--	890	(1206)



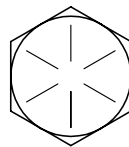
GRADE-2



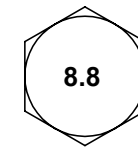
GRADE-5



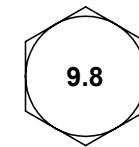
GRADE-8



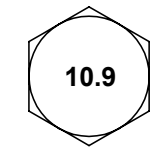
CLASS 8.8



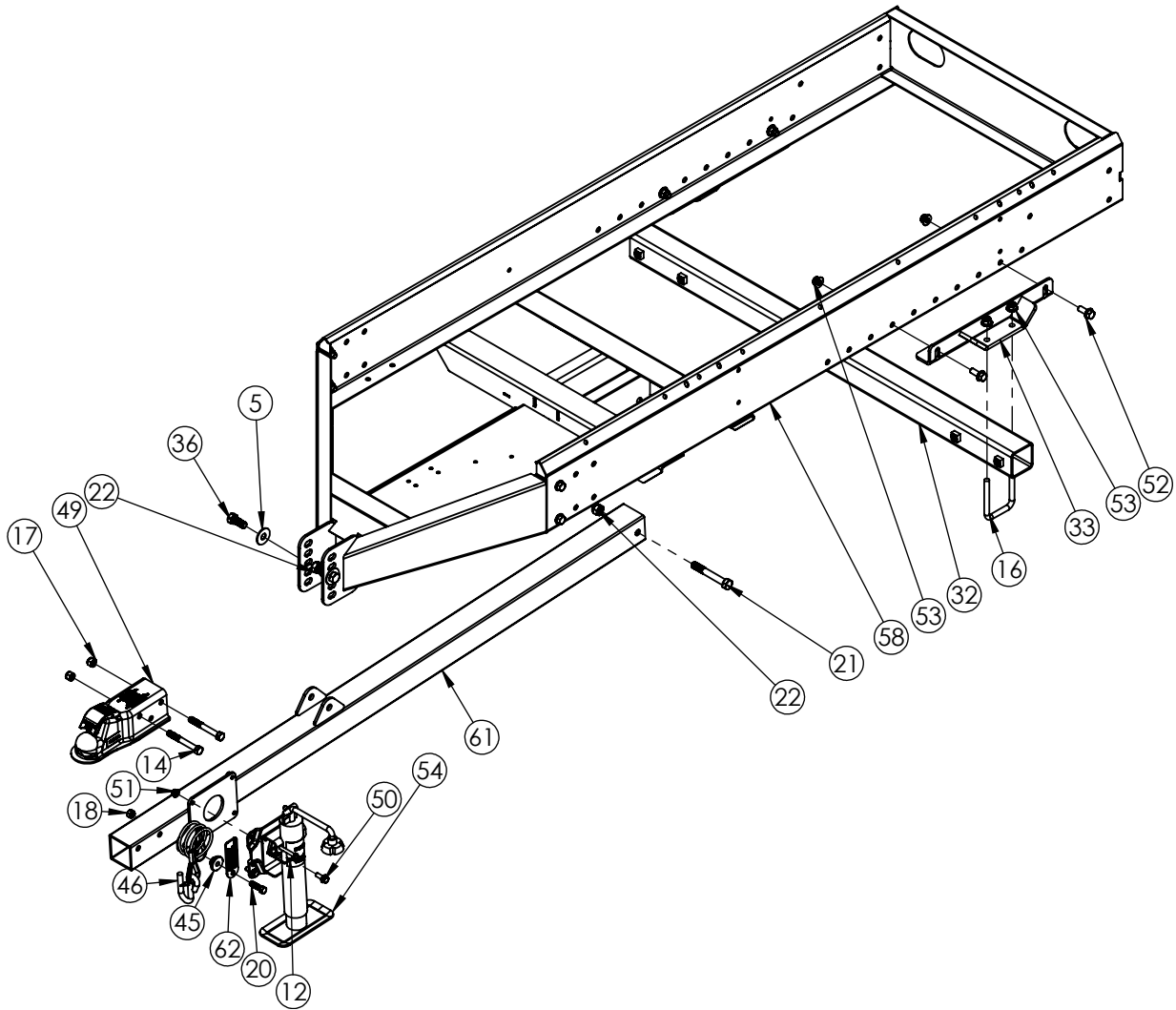
CLASS 9.8



CLASS 10.9



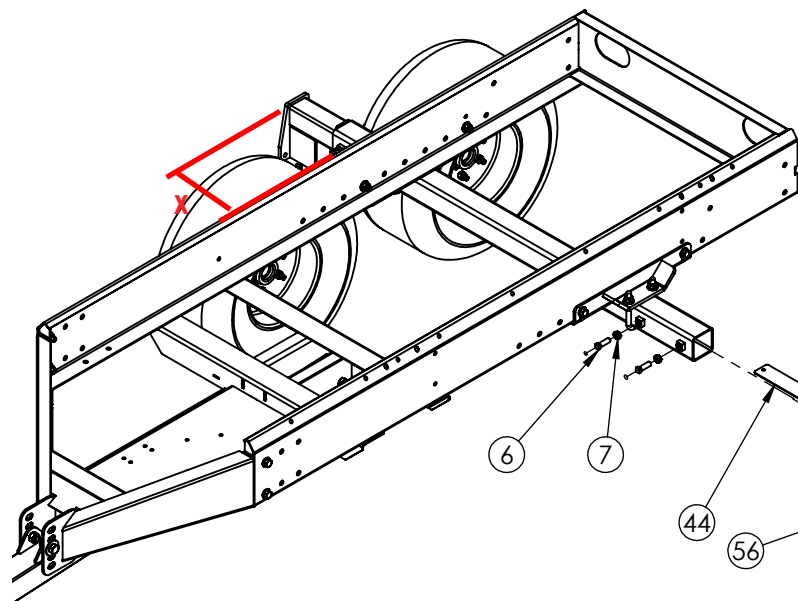
## TONGUE/AXLE ASSEMBLY



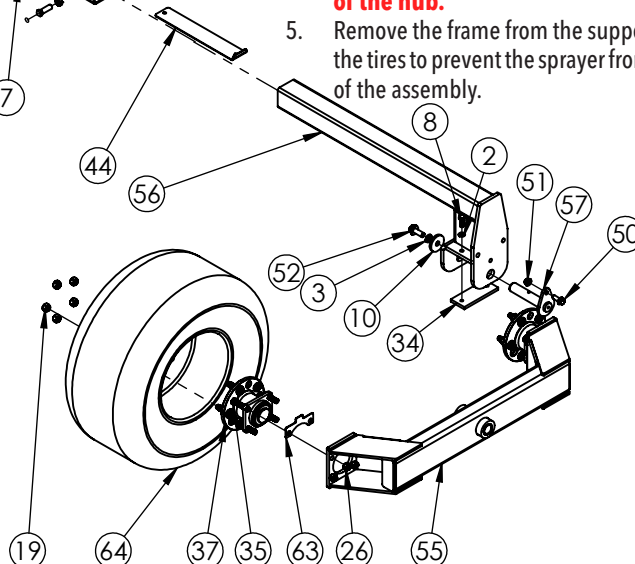
### ASSEMBLY INSTRUCTIONS

1. Place the frame on something sturdy, approximately 17"-18" off the floor, near the rear corners and the angled tongue area of the frame. With four 1/2" x 1-1/4" hex flange head bolts (#52) and four 1/2" nylon insert flange locknuts (#53), bolt the left and right axle mounts (#33) to the main frame on the bottom side. **NOTE:** The axle mounts may be moved forward or backwards to obtain the proper tongue weight.
2. Continue by bolting the axle tube (#32) to the axle mounts using two 1/2" x 3" square u-bolts (#16) and four 1/2" nylon insert locknuts (#53). **NOTE:** Be sure the weld-on nuts are facing the front of the sprayer. Also center the axle tube under the sprayer frame.
3. Next bolt the rear of the tongue tube (#61) to the frame using one 5/8" x 4-1/2" hex head bolt (#21) and one 5/8" nylon insert locknut (#22). Bolt the front of the tongue to the frame using two 5/8" x 1-1/2" hex head bolts (#36), two 5/8" flat washers (#5), and locknuts (#22). **NOTE:** The tongue may be adjusted up or down so the trailer is level when attached to the towing vehicle. Attach the ball coupler (#49) to the tongue tube using two 1/2" x 4" hex head bolts (#14) and locknuts (#17). Attach the Jack (#54) using four 3/8" X 1.00 hex flange head bolts (#50) and four 3/8" nylon insert flange locknuts (#51). Finally attach the safety cable (#46) and safety tag (#62) using a stepped washer (#45), one 7/16" X 1.50" hex bolt GR.8 (#20), and one 7/16" nut GR.8 (#18).

## AXLE INSERT INSTALLATION

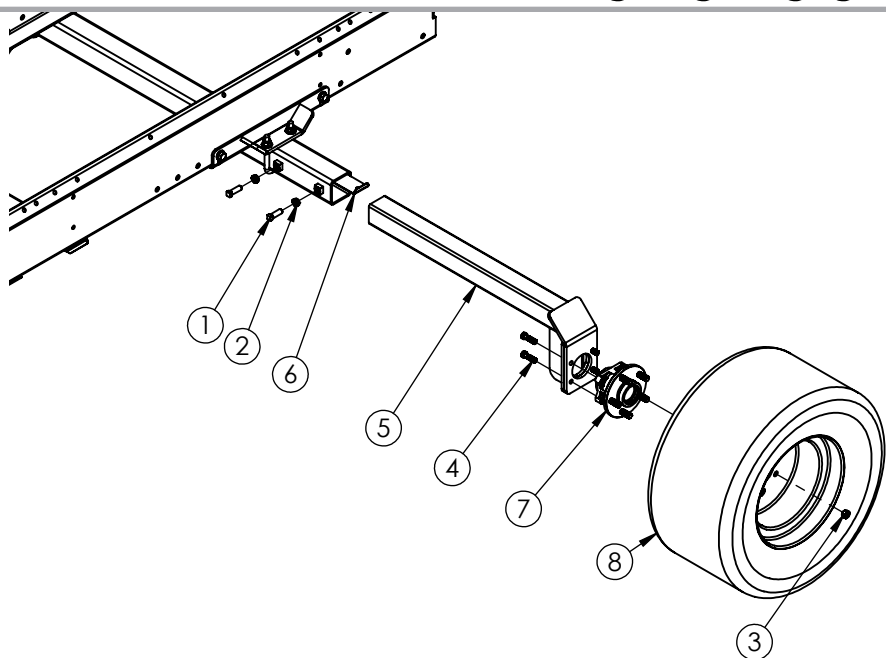


	Wheel Spacing	X Dimension
Min.	66"	6.5"
Max.	86"	16.5"



## TANDEM AXLE ASSEMBLY INSTRUCTIONS

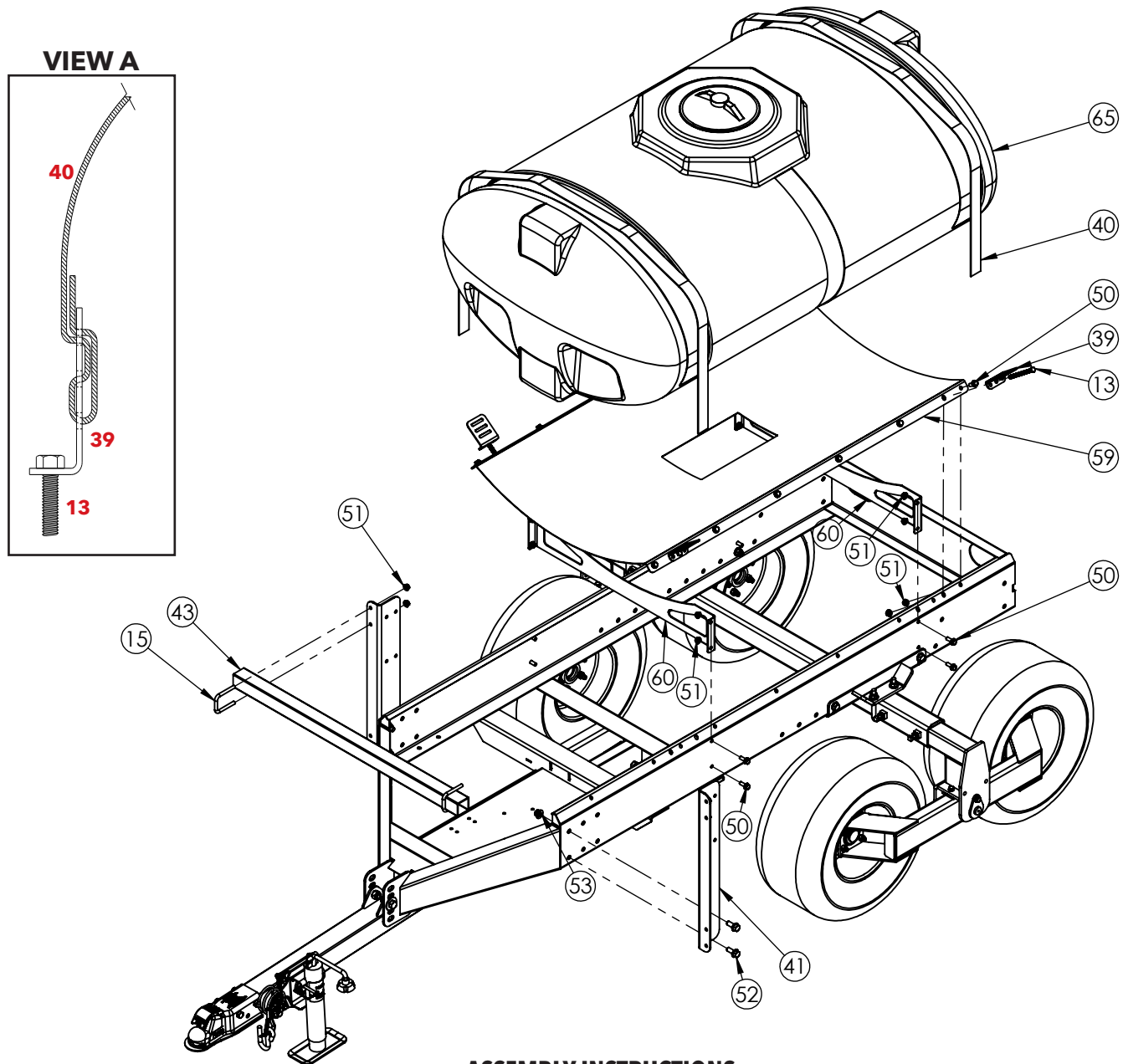
1. Insert two axle inserts (#56) into the axle tubes with shims (#44). Select your particular wheel spacing using the chart to figure the **X** dimension. The axle should be inserted to this measurement.
2. Thread four 1/2" jam nuts (#7) onto the 1/2" x 1-1/2" square head set screws (#6). Tighten the 1/2" set screws into the weld-on nuts on the back of the axle tube. Now tighten the jam nuts against the weld-on nuts to secure everything in place.
3. Install the walking beam (#55) using the pin (#57) and fasteners shown. Add shim (#34) if a fixed axle is desired.
4. Install the four hubs (#37) and shims (#63) to the walking beam using four 7/16" X 1.50" hex head bolts (#35) and four 7/16" nylon lock nuts (#26) per hub. Mount the tires and rims (#64) to the axles using five wheel nuts (#19) per rim. **Make sure the shims (#63) are located on the top of the hub.**
5. Remove the frame from the supporting objects and block the tires to prevent the sprayer from rolling during the rest of the assembly.



## SINGLE AXLE ASSEMBLY INSTRUCTIONS

1. Insert two axle inserts (#5) into the axle tubes with shims (#6). Select your particular wheel spacing using the chart to figure the **X** dimension. The axle should be inserted to this measurement.
2. Thread four 1/2" jam nuts (#1) onto the 1/2" x 1-1/2" square head set screws (#2). Tighten the 1/2" set screws into the weld-on nuts on the back of the axle tube. Now tighten the jam nuts against the weld-on nuts to secure everything in place.
4. Install the two hubs (#7) to the walking beam using four 7/16" X 1.50" hex head bolts per hub. Mount the tires and rims (#8) to the axles using five wheel nuts (#3) per rim.
5. Remove the frame from the supporting objects and block the tires to prevent the sprayer from rolling during the rest of the assembly.

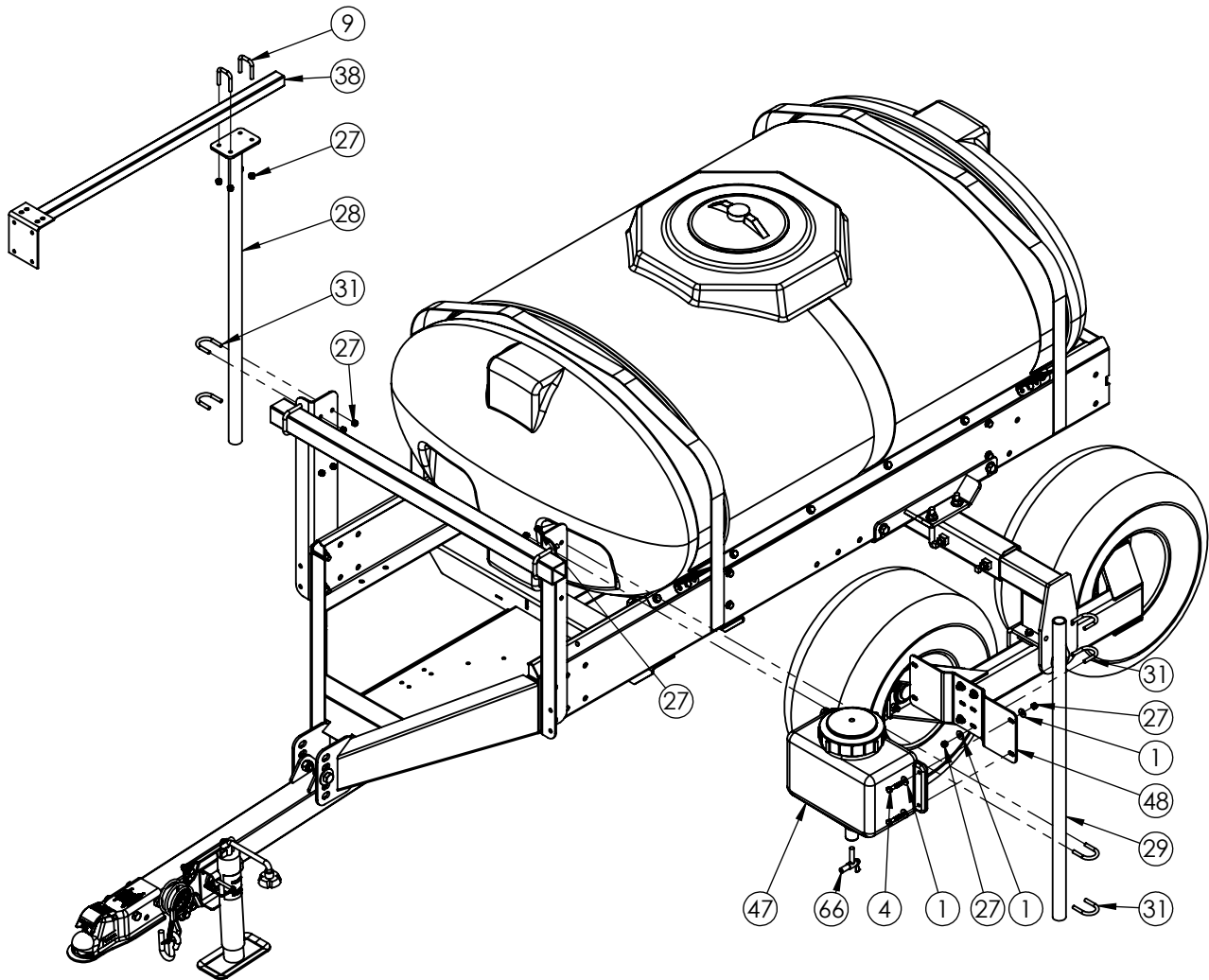
## SADDLE ASSEMBLY AND TANK INSTALLATION



### ASSEMBLY INSTRUCTIONS

1. Bolt the two saddle supports (#60) to the frame, in the location shown in the drawing, using eight 3/8" x 1.00" hex head flange bolts (#50) and eight 3/8" nylon insert flange locknuts (#51). Lay the saddle (#59) in the frame. Bolt it down using twelve 3/8" x 1.00" hex head flange bolts (#50) and twelve 3/8" nylon insert flange locknuts (#51). Use a clamp to pull the saddle down while bolting.
2. Place tank (#65) in the saddle (#59) and be sure the fill well area of the tank is level. Weave the a polyester strap (#40) through two small strap anchors (#39), as shown in View A, one on each end. Do the same for the other strap.
3. Secure the tank in place by placing a strap over each strap area on the tank, some adjustment on the strap anchors maybe necessary, and secure the anchors with four 5/16" x 4" full thread bolts (#13), four 5/16" flat washers , and four 5/16" nylon insert locknuts. **NOTE:** Be sure not to over tighten the straps.
4. **Front Cross Tube Assembly:** Bolt the Front Uprights (#41) to the frame using four 1/2" x 1-1/4" hex head flange bolts (#52), and four 1/2" nylon insert flange locknuts (#53). Bolt the cross tube (#43) as shown, using two 3/8" x 2-1/16" x 3.00" u-bolts (#15) and nylon locknuts (#51).

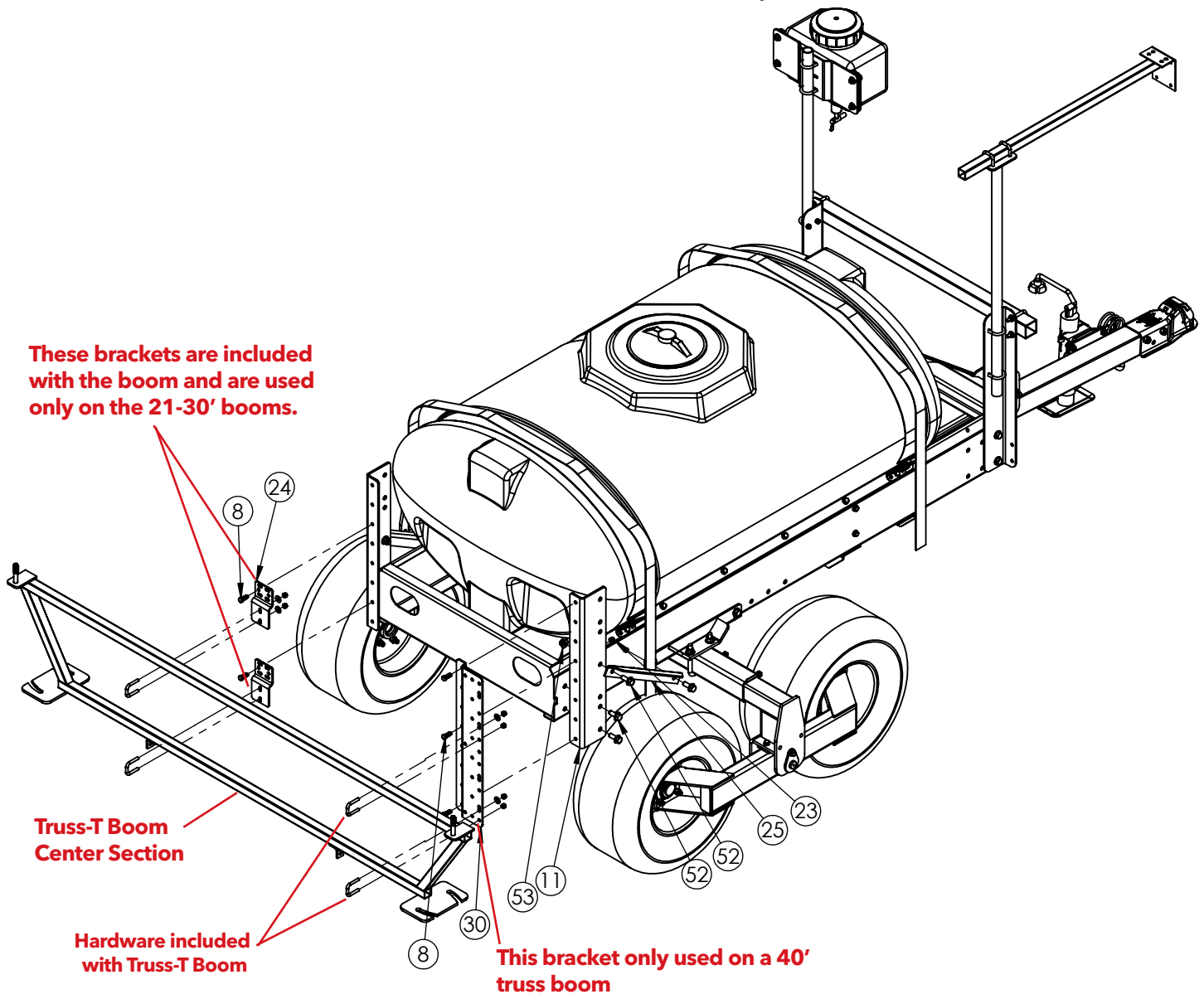
## PANEL MOUNT/WASH TANK ASSEMBLY



### ASSEMBLY INSTRUCTIONS

1. Bolt the vertical valve mount bracket (#28) and the accessory tube (#29) to the uprights as shown using four 5/16" x 1-3/8" x 2" round u-bolts (#31) and eight 5/16" nylon insert locknuts (#27).
2. Bolt the panel mount stem (#38) to the vertical valve mounting bracket using two 5/16" x 1-1/4" square u-bolt (#9) and four 5/16" nylon insert locknuts (#27). **NOTE:** The panel mount stem and vertical valve mounting bracket can slide, before tightening bolts and set screws, to increase or decrease the reach of the stem.
3. Bolt the wash tank bracket (#48) to the accessory tube using two 5/16" x 1-1/4" u-bolts (#31), four 5/16" flat washers (#1), and four 5/16" nylon insert locknuts (#27). **NOTE:** The wash tank bracket can be mounted in any position on the mounting tube that is convenient for you.
4. Bolt the wash tank (#47) to the bracket using four 5/16" x 1.50" hex head bolts (#4), eight 5/16" flat washers (#1), and four 5/16" nylon insert locknuts (#27).

## 21', 30' AND 40' TRUSS-T BOOM INSTALLATION



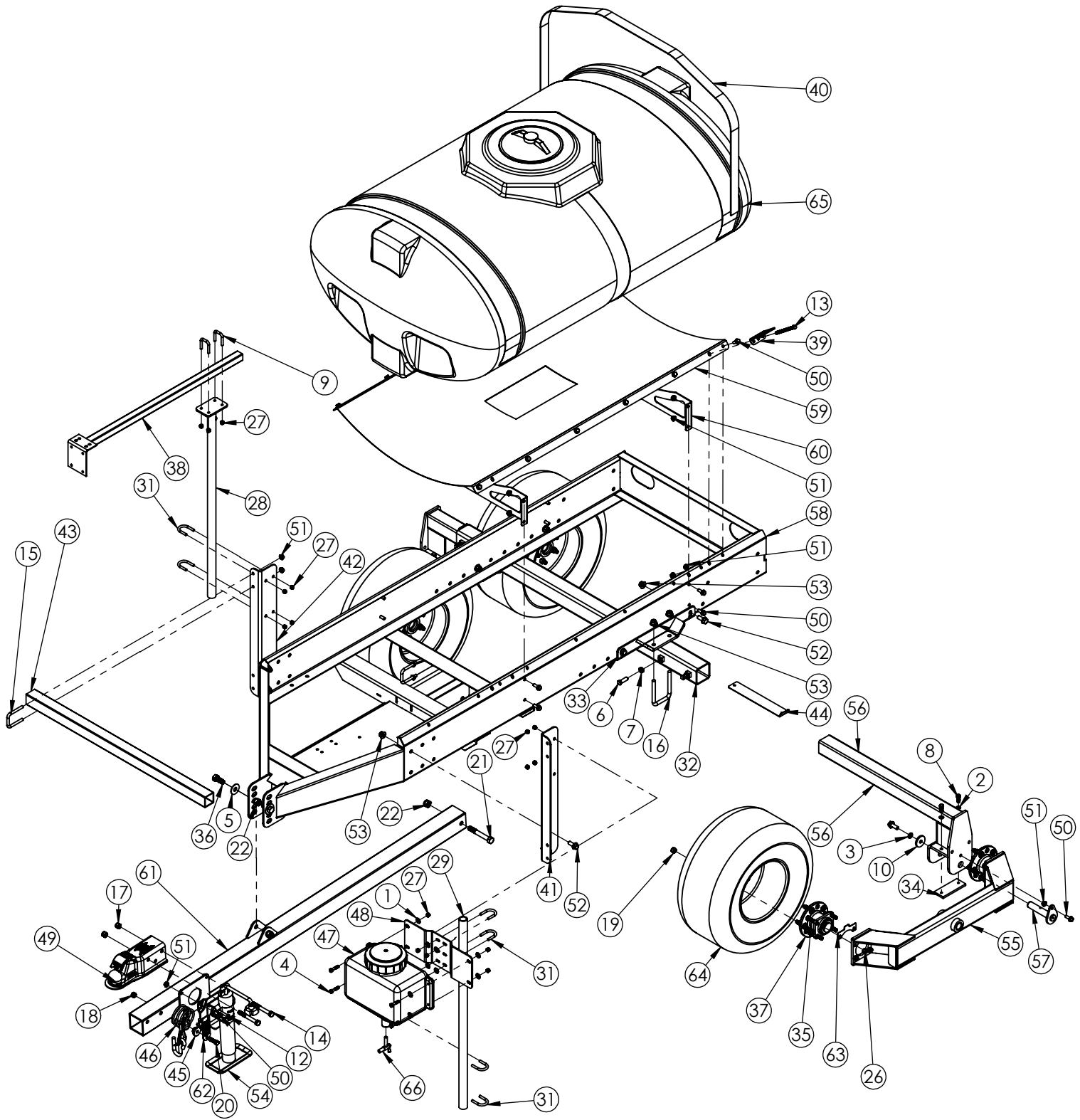
### ASSEMBLY INSTRUCTIONS

1. Attach the two boom mounting angles (#11) to the frame in the holes furthest to the rear using four 1/2" x 1-1/4" hex head flange bolts (#52) and four 1/2" nylon insert locknuts (#53).
2. Bolt the boom brace angles (#25) between the frame and the mounting angles in the holes shown, also using four 1/2" x 1-1/4" hex head flange bolts (#52) and four 1/2" nylon insert locknuts (#53).
3. Bolt the boom adapter brackets (#30) (40' boom) to the mounting angles (#11), as shown, using six 3/8" x 1" hex head bolts (#8) and six 3/8" nylon insert locknuts (#23).
4. Attach the 21'-30' Truss-T boom center section as shown using the hardware supplied with the boom (#24, #8, & #23).

**NOTE:** You can raise or lower the boom by moving the brackets (#24 or #30), moving the mounting angles (#11), bolting the boom center section in the high or low settings or any combination there of.



150 & 200 GALLON ATV SPRAYER



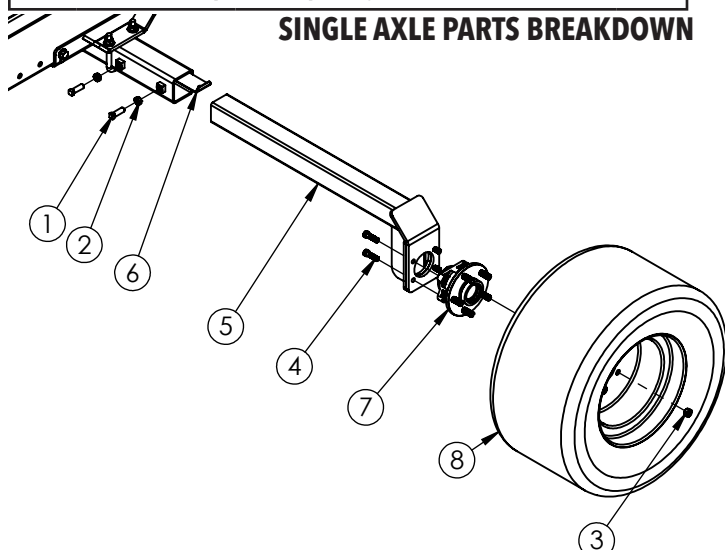


ITEM	PART #	DESCRIPTION	QTY
1	00004	WASHER, FLAT, .313	12
2	00060	WASHER, LOCK, .375	4
3	00084	WASHER, LOCK, .50	2
4	00372	BOLT, .313 NC X 1.50 HEX HEAD GR.5	4
5	00477	WASHER, FLAT, .625	2
6	00639	SET SCREW, .50 NC X 1.50 SQ HEAD	4
7	00640	NUT, .50NC JAM	4
8	00907	BOLT, .375 NC X 1.00 HEX HEAD GR.5	9
9	00909	U-BOLT, SQ, .313NC X 1	2
10	01675-95	PIVOT PIN WASHER	2
11	01792-72	BOOM MOUNT	2
12	01855	PIN, SAFETY LOCK	2
13	01885	BOLT, .375 NC X 5.00 HEX HEAD FULL THREAD	4
14	01896	BOLT, .50 NC X 4.00 HEX HEAD GR.5	2
15	02128	U-BOLT, SQ, .375NC X 2.063 X 3.00	2
16	02129	U-BOLT, SQ, .50NC X 3.00 X 4.75	2
17	02178	NUT, .50 NC NYLON LOCK	2
18	02209	NUT, .438 NF HEX GR.8	1
19	02213	NUT, WHEEL 12MM X 1.5	20
20	02377	BOLT, .438 NF X 1.50 HEX HEAD GR.8 EPOXY	1
21	02434	BOLT, .625 NC X 4.50 HEX HEAD GR.5	1
22	02587	NUT, .625 NC NYLON LOCK	3
23	02592	NUT, .375NC NYLON LOCK	5
24	02678-95	UNIVERSAL BOOM MOUNTING	2
25	02693-72	BRACE ANGLE	2
26	02771	NUT, .434 NC NYLON LOCK	16
27	02802	NUT, .313 NC NYLON LOCK	20
28	03243-72	VERTICAL VALVE MOUNTING BRACKET	1
29	03252-72	TUBE UPRIGHT	1
30	03275-72	BOOM MOUNT	1
31	03283	U-BOLT, RND, .313NC X 1.375 X 2.00	6
32	03285-72	AXLE TUBE	1
33	03286-72	SINGLE AXLE MOUNT ASSEMBLY	2
34	03832-72	PIVOT STOP	2
35	04050	BOLT, .438NC X 1.50 HEX HEAD GR.5	16
36	04051	BOLT, .625 NC X 1.50 HEX HEAD GR.5	2
37	04369	5-BOLT HUB/SPINDLE	4
38	05391-72	HORIZONTAL PANEL MT STEM-RMSE	1
39	05785-95	STRAP ANCHOR	4
40	09826	STRAP, NYLON 1.75 x 86" BLACK	2
41	11680-72	LEFT BOOM REST UPRIGHT F/ 200 GAL ATV	1
42	11682-72	UPRIGHT SUPPORT	1
43	11716-72	CROSS TUBE ATV TRAILER SPRAYER	1
44	11989-72	AXLE SHIM	2
45	12229-95	SAFETY CABLE MOUNTING WASHER	1
46	12238	CABLE, SAFETY 36" BLACK	1
47	12793	EYE WASH TANK WITH LID	1
-	PL5A	REPLACEMENT LID 2.5 GAL	-
48	14471-72	2.5 GAL. EYE WASH TANK BRACKET	1
49	15945	2" BALL COUPLER BOLT ON eZ	1
50	16259	BOLT, .375NC X 1.00 HEX HEAD GR.5 FLANGE	26
51	16260	NUT, .375NC NYLON LOCK FLANGE	34
52	16588	BOLT, .50NC X 1.25 HEX HEAD GR.5 FLANGE	18
53	16590	NUT, .50NC NYLON LOCK FLANGE	20
54	16730	2,000LBS SIDE JACK	1
55	17198-72	TANDEM WALKING BEAM	2
56	17199-72	TANDEM AXLE INSERT	2
57	17200-95	PIVOT PIN F/ TANDEM AXLE	2
58	17202-72	FRAME ATV TRAILER SPRAYER	1
59	17203-72	SADDLE F/ 200 GAL (PE200RA)	1
-	17205-72	SADDLE F/ 150 GAL (PE150RA)	-
60	17204-72	200 GAL TANK SUPPORT	2
-	17206-72	150 GAL TANK SUPPORT	-
61	17237-72	TONGUE F/ 150 & 200 GAL ATV	1

Please order replacement parts by PART NO. and DESCRIPTION

ITEM	PART #	DESCRIPTION	QTY
62	17258	SAFETY CHAIN TAG	1
63	17325-72	HUB SHIM	4
64	17713	TIRE / WHEEL 22 X 11-10 4 PLY ON 5 X 4.5	4
65	PE200RA	200 GAL POLY ELIP. TANK	1
-	09319	REPLACEMENT TANK LID 200 GAL	-
-	PE150RA	150 GAL POLY ELIP. TANK	-
-	5478R	REPLACEMENT TANK LID 150 GAL	-
66	PL2S	VALVE F/ 2.5 GAL	1

Please order replacement parts by PART NO. and DESCRIPTION



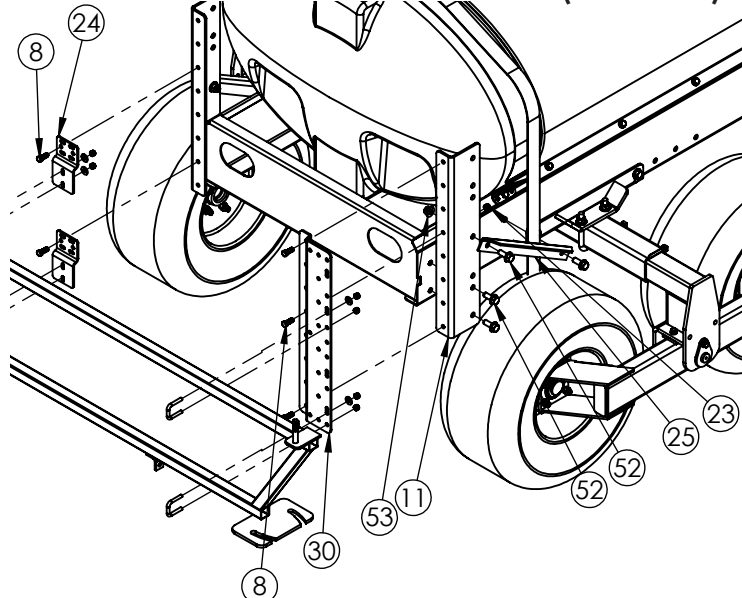
SINGLE AXLE PARTS BREAKDOWN

SINGLE AXLE PARTS LIST

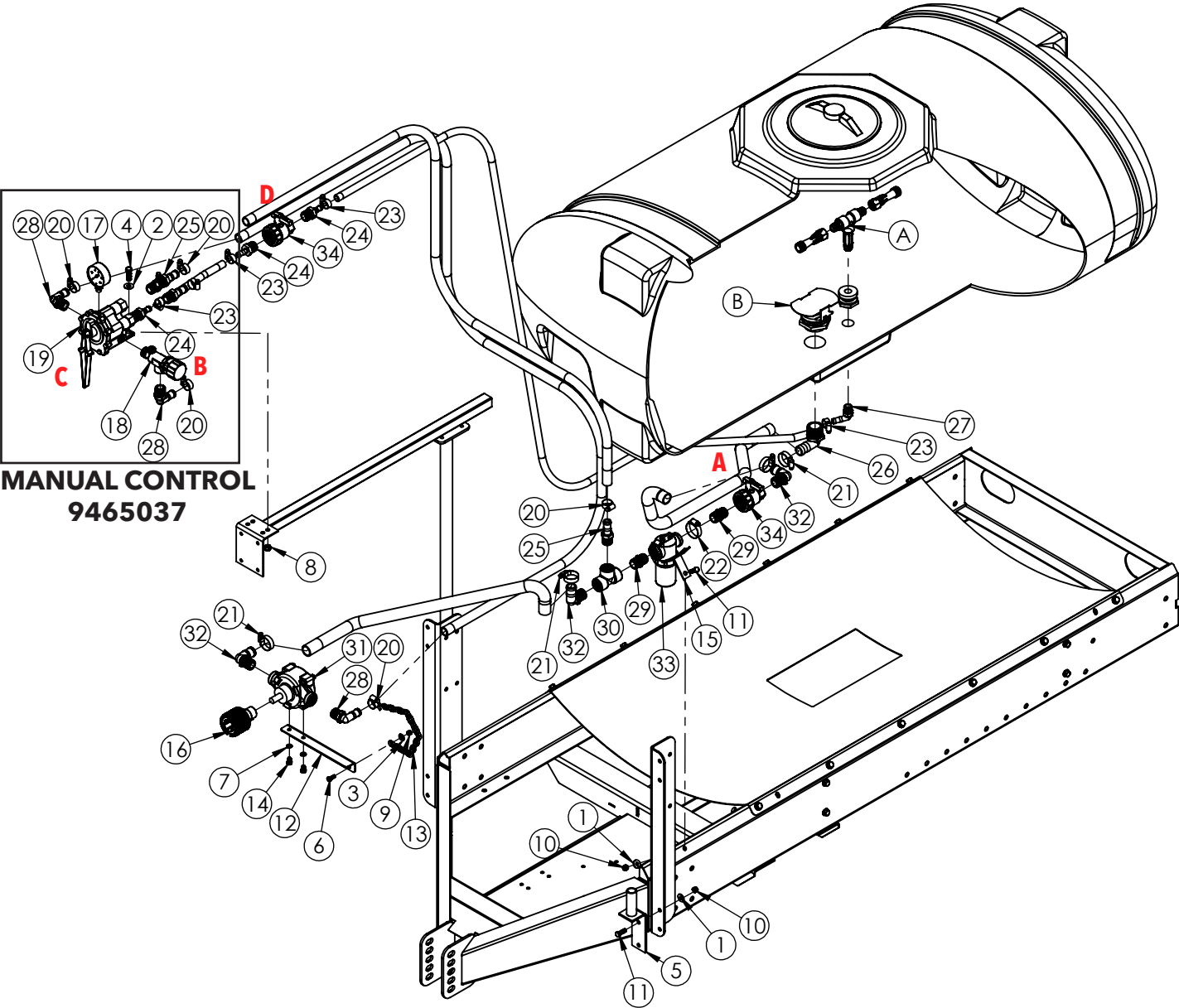
ITEM	PART #	DESCRIPTION	QTY
1	00639	SET SCREW, .50NC X1.50 SQ HD ZINC	4
2	00640	NUT, .50NC JAM	4
3	02213	NUT WHEEL, 12MM X 1.5 ZINK	10
4	02377	BOLT, .438 NF X 1.50 HEX HEAD GR.8 EPOXY	8
5	11691-72	SINGLE AXLE INSERT	2
6	11989-72	AXLE SHIM	2
7	16664	HD SEALED HUB	2
8	5775	TIRE / WHEEL 24 X 12 X 12 X 4 PLY ON 5 X 4.5 BOLT	2

Please order replacement parts by PART NO. and DESCRIPTION

BOOM MOUNTS (REAR VIEW)



ROLLER PUMP PLUMBING PARTS BREAKDOWN



## ROLLER PUMP PLUMBING PARTS LIST

ITEM	PART #	DESCRIPTION	QTY
1	<b>00004</b>	WASHER, FLAT, .313	2
2	<b>00059</b>	WASHER, FLAT, .375	2
3	<b>00214</b>	WASHER, FLAT, .25	1
4	<b>00523</b>	BOLT, .375NC X 1.25 HEX HEAD GR.5	2
5	<b>00857-72</b>	ROLLER PUMP STORAGE BRK	1
6	<b>01076</b>	BOLT, .25NC X .75 HEX HEAD GR.5	1
7	<b>01997</b>	WASHER, SPRING LOCK, .313	2
8	<b>02592</b>	NUT, .375NC NYLON LOCK	2
9	<b>02772</b>	NUT, .25NC NYLON LOCK	1
10	<b>02802</b>	NUT, .313 NC NYLON LOCK	2
11	<b>02990</b>	BOLT, .313 NC X 1.00 HEX HEAD GR.5	2
12	<b>04298-72</b>	ROLLER PUMP MOUNTING	1
13	<b>04299</b>	ROLLER PUMP CHAIN HOOK ASSEMBLY	1
14	<b>04305</b>	BOLT, .313 NC X .50 HEX HEAD GR.5	2
15	<b>05596-95</b>	ASSY PLUMBING MOUNT	1
16	<b>1321 0012</b>	QUICK COUPLER (540 RPM PTO)	1
17	<b>160GB</b>	GAUGE BRASS 160#	1
18	<b>23340PP</b>	VALVE, PRESSURE RELIEF, 3/4"	1
19	<b>AA171</b>	VALVE, TEE, THREE SECTION	1
Please order replacement parts by PART NO. and DESCRIPTION			

ITEM	PART #	DESCRIPTION	QTY
20	<b>B12H</b>	CLAMP, GEAR, SS, .75" HOSE	7
21	<b>B20H</b>	CLAMP, GEAR, SS, F/1.0" HOSE	4
22	<b>B24H</b>	CLAMP, GEAR, SS, F/1.25" HOSE	2
23	<b>B8H</b>	CLAMP, GEAR, SS, .50" HOSE	4
24	<b>BA3412</b>	FTG, STR, .75" MPT X .5" HB GFP	3
25	<b>BA3434</b>	FTG, STR, .75" MPT X .75" HB GFP	4
26	<b>BEL114 1</b>	FTG, ELB, 1.25" MPT X 1" HB GFP	1
27	<b>BEL1212</b>	FTG, ELB, .5" MPT X .5" HB GFP	1
28	<b>BEL3434</b>	FTG, ELB, .75" MPT X .75" HB GFP	3
29	<b>BM3400</b>	FTG, NIP, .75" MPT GFP	2
30	<b>BTT34</b>	FTG, TEE, .75" FPT GFP	1
31	<b>C6500</b>	PUMP ROLLER LESS COUPLER	1
32	<b>EL3410</b>	FTG, ELB, .75" MPT X 1" HB	3
33	<b>RVF34 80</b>	STRAINER 80 MESH X .75 FPT	1
-	<b>RVF34B</b>	STRAINER BOWL	-
-	<b>RVF34C</b>	STRAINER CAP	-
-	<b>RVF34GV</b>	VITON O-RING	-
-	<b>RVF380</b>	80 MESH SCREEN	-
34	<b>UV075FP</b>	BALL VALVE, .75" SINGLE UNION	2
Please order replacement parts by PART NO. and DESCRIPTION			

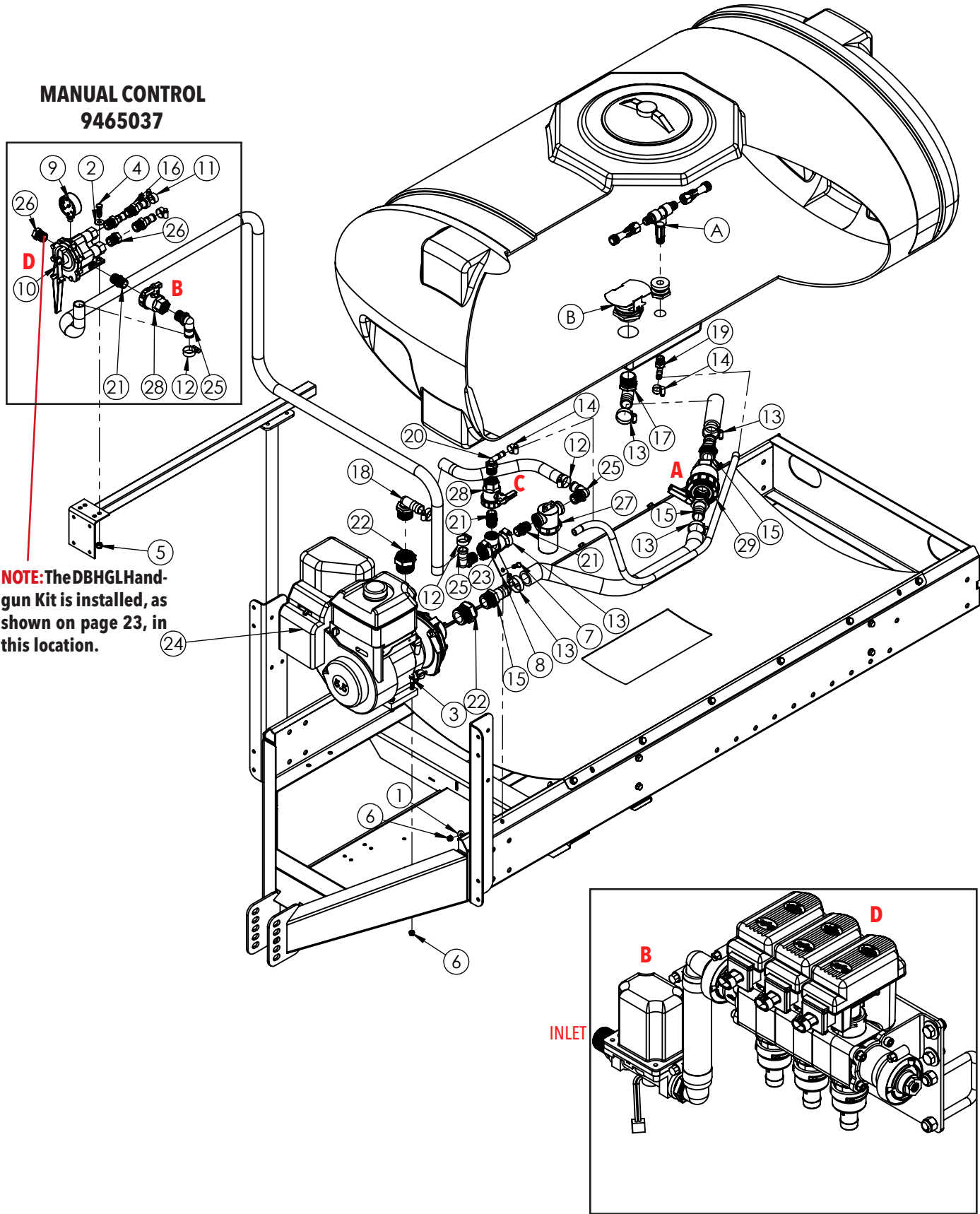
## TANK FITTINGS PARTS LIST

ITEM	PART #	DESCRIPTION	QTY
A	<b>D3371PA</b>	DOUBLE AGITATION ASSEMBLY	1
-	<b>5044 1</b>	JET AGITATION WAND	-
-	<b>R1212</b>	1/2" MPT TEE	-
-	<b>P012D</b>	1/2" TANK FITTING	1
B	<b>P114AV</b>	1-1/4" TANK OUTLET	1
Please order replacement parts by PART NO. and DESCRIPTION			

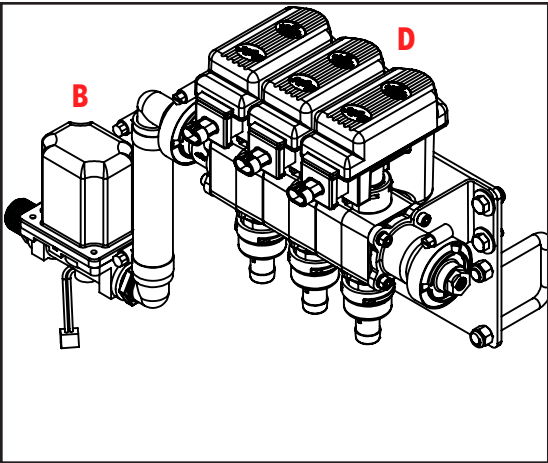
## OPERATING INSTRUCTIONS

1. Fill the tank with water.
2. Open the Ball valve (**A**) in the pump intake line.
3. Open (counter clockwise) the pressure relief valve (**B**).
4. Open the Tee valve (**C**) so that all the boom sections are spraying.
5. Open the agitation valve (**D**).
6. Start and run pump.
7. Slowly close the pressure relief valve (**B**) until the desired spraying pressure is reached with the boom spraying.
8. If adequate spraying pressure cannot be reached, slowly close the agitation valve (**D**) until the desired spraying pressure is reached.
9. Check for leaks.
10. Check all fasteners, periodically, on the sprayer for proper torque according to torque chart on page 13.

CENTRIFUGAL (DHC155H) PUMP PLUMBING PARTS BREAKDOWN



**NOTE:** The DBHGL Hand-gun Kit is installed, as shown on page 23, in this location.



**ELECTRIC CONTROL  
9465069**

**NOTE:** See manual AB20083 for replacement parts

## CENTRIFUGAL (DHC155H) PUMP PLUMBING PARTS LIST

ITEM	PART #	DESCRIPTION	QTY
1	00004	WASHER, FLAT, .313	1
2	00059	WASHER, FLAT, .375	2
3	00372	BOLT, .313NC X 1.50 HEX HEAD GR.5	4
4	00523	BOLT, .375NC X 1.25 HEX HEAD GR. 5	2
5	02592	NUT, .375NC NYLON LOCK	2
6	02802	NUT, .313 NC NYLON LOCK	5
7	02990	BOLT, .313 NC X 1.00 HEX HEAD GR.5	1
8	05596-95	ASSY PLUMBING MOUNT	1
9	100GB	100# GAUGE BRASS	1
10	AA171	VALVE TEE, THREE SECTION	1
11	B12H	CLAMP, GEAR, SS .75" HOSE	3
12	B16H	CLAMP, GEAR, SS 1" HOSE	4
13	B24H	CLAMP, GEAR, SS F/1.25" HOSE	6
14	B6H	CLAMP, GEAR, SS .50" & .375" HOSE	2
15	BA114	FTG, STR, 1.25" MPT X 1.25" HB GFP	3
16	BA3434	FTG, STR, .75" MPT X .75" HB GFP	3
17	BEL114	FTG, ELBOW, 1.25" MPT X 1.25" HB GFP	1
18	BEL114 1	FTG, ELBOW, 1.25" MPT X 1" HB GFP	1
19	BEL1212	FTG, ELBOW, .5" MPT X .5" HB GFP	1
20	BEL3412	FTG, ELBOW, .075" MPT X .50" HB GFP	1
21	BM3400	FTG, NIP, .75" MPT GFP	3
22	BRB112 114	FTG, REDUCER BSHG, 1.5" MPT X 1.25" FPT GFP	2
23	BTT34	FTG, TEE, .75" FPT GFP	1
24	DHC155H	HONDA 5.5 HP ENGINE W/ CENTRIFUGAL PUMP	1
-	DHC155	POWER PRO 6.5 HP W/ CENTRIFUGAL PUMP	-
-	DHC155LE	REPLACEMENT CENTRIFUGAL PUMP	-
25	EL3410	FTG, ELBOW, .75" MPT X 1" HB	3
26	F3400	3/4" FPT PLUG	2
Please order replacement parts by PART NO. and DESCRIPTION			

ITEM	PART #	DESCRIPTION	QTY
27	RVF34 80	STRAINER, 80 MESH X .75 FPT	1
-	RVF34B	STRAINER BOWL	-
-	RVF34C	STRAINER CAP	-
-	RVF34GV	VITON O-RING	-
-	RVF3800	80 MESH SCREEN	-
28	UV075FP	.75" BALL VALVE	2
29	UV125FP	1.25" BALL VALVE	1
Please order replacement parts by PART NO. and DESCRIPTION			

## TANK FITTINGS PARTS LIST

ITEM	PART #	DESCRIPTION	QTY
A	D3371PA	DOUBLE AGITATION ASSEMBLY	1
-	5044 1	JET AGITATION WAND	-
-	R1212	1/2" MPT TEE	-
-	P012D	1/2" TANK FITTING	1
B	P114AV	1-1/4" TANK OUTLET	1
Please order replacement parts by PART NO. and DESCRIPTION			

- Run approximately 50 gallons of water into the tank.
- Open the poly ball valve (A) in the pump intake line. Important: Remove top plug on pump to bleed all air from the suction line to the pump or damage will result to the seals. (Pump cannot be run dry).
- Open valve (B) on the Tee valve.
- Close the wedge agitation valve (C) on the plumbing sub-assembly. (Located on the front cross member.)
- Make sure all three boom valve (D) are open.
- Start the pump and run at approx. 540 RPM.
- Close valve (B) until the gauge reads 7-10 PSI over your desired spraying pressure with all three boom sections spraying.

## OPERATING INSTRUCTIONS

**NOTE:** The spraying pressure may vary depending on the size of tip and the chemical being sprayed.

- Open the wedge agitation valve (C) until the gauge drops to your desired spraying pressure.

**Example:** If desired spraying pressure is 30 PSI open the wedge valve on Tee valve until the pressure reads 37 PSI. After this, open the wedge agitation valve until the gauge drops back to 30 PSI. (This is to ensure the recommended pressure to tank jet agitators).

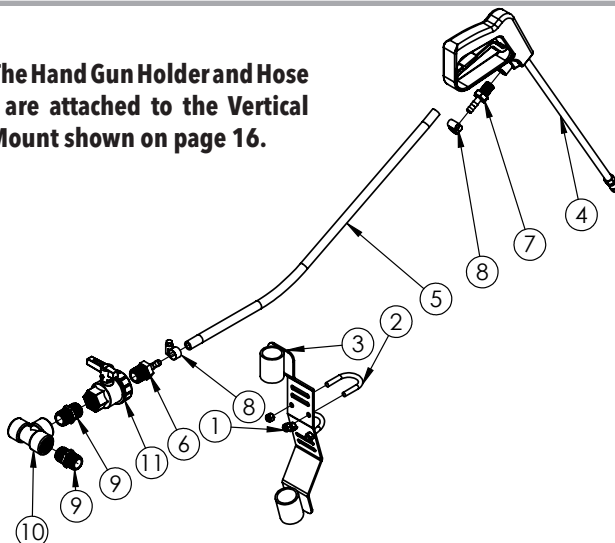
- Check for leaks.
- Check tip wear and pressures periodically.

## (DBHGL) HANDGUN KIT PARTS BREAKDOWN

### (DBHGL) HANDGUN KIT PARTS LIST

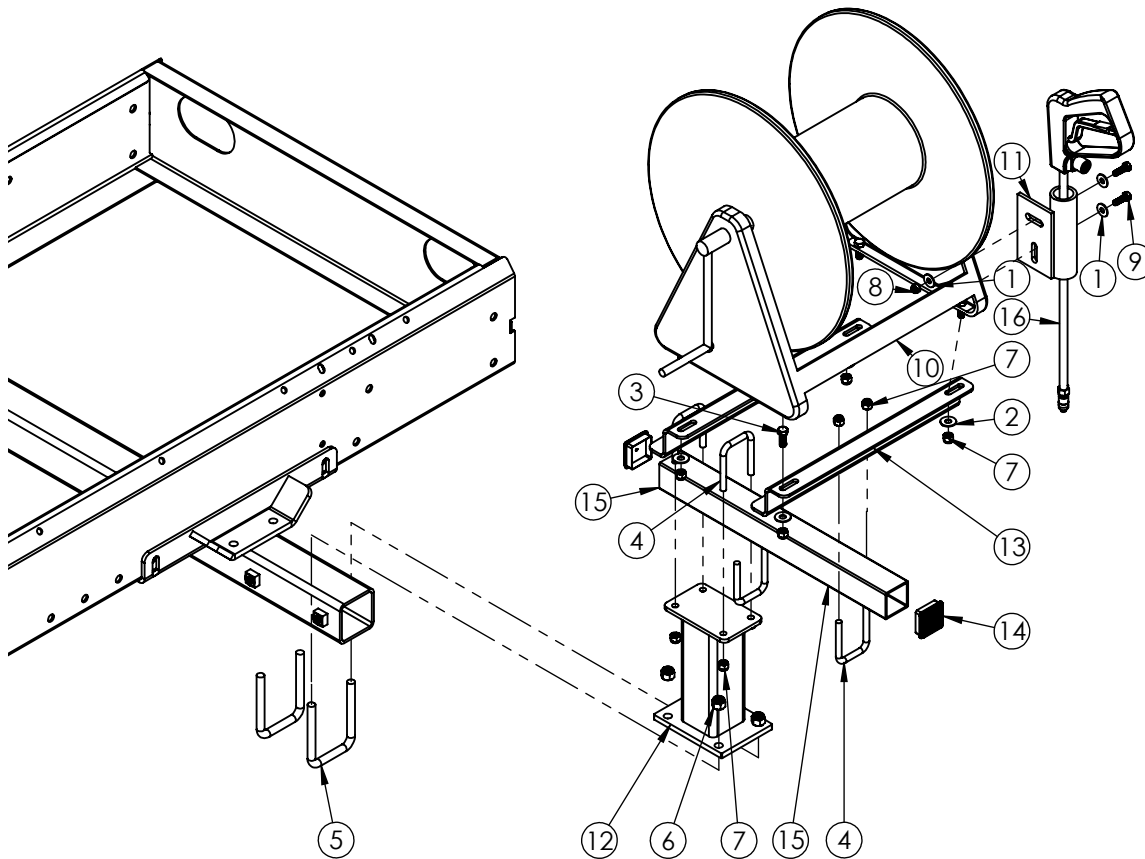
ITEM	PART #	DESCRIPTION	QTY
1	02802	NUT, .313 NC NYLON LOCK	4
2	03283	U-BOLT, RND, .313NC X 1.375 X 2.00	2
3	05595-72	HANDGUN & HOSE HOLDER	1
4	12434	SPRAY GUN, 18" SYNTHETIC HAND	1
5	380RB	3/8" ID RUBBER HOSE	25FT
6	A3438	FTG, STR, .75" MPT X .375" HB	1
7	A3838	FTG, .375" MPT X .375" HB	1
8	B6H	CLAMP, GEAR, SS .375" HOSE	2
9	BM3400	FTG, NIP, .75" MPT GFP	2
10	BTT34	FTG, TEE, .75" FPT GFP	1
11	UV075FP	BALL VALVE, .75" SINGLE UNION	1
Please order replacement parts by PART NO. and DESCRIPTION			

**NOTE:** The Hand Gun Holder and Hose Holder are attached to the Vertical Panel Mount shown on page 16.



# Plumbing Parts Breakdown

## (OPTIONAL) HOSE REEL PARTS BREAKDOWN AND ASSEMBLY



### (OPTIONAL) HOSE REEL PARTS LIST

ITEM	PART #	QTY	DESCRIPTION
1	00004	4	5/16" FLAT WASHER
2	00059	8	3/8" FLAT WASHER
3	00907	4	BOLT, .38" NC X 1" HEX HEAD
4	02128	4	U-BOLT, .38"NC X 2" SQUARE
5	02129	2	U-BOLT, .50"NC X 3" SQUARE
6	02178	4	NUT, .50"NC NYLON LOCK
7	02592	12	NUT, .38"NC NYLON LOCK
8	02802	2	NUT, .313"NC NYLON LOCK
9	02990	2	BOLT, .313" NC X 1" HEX HEAD
10	03279	1	HOSE REEL
11	03332-72	1	HANDGUN STORAGE BRACKET
12	03850-72	1	MOUNTING POST FOR HOSE REEL
13	03851-72	2	HOSE REEL MOUNT BRACKET
14	04193	2	CAP PLUG SQUARE
15	11830-72	1	MOUNTING TUBE
16	12434	1	18" HAND GUN
-	BA1212	1	1/2" MPT x 1/2" HOSE BARB FTG (GFP)
-	BA1234	1	1/2" MPT x 3/4" HOSE BARB FTG (GFP)
-	BA3434	1	3/4" MPT x 3/4" HOSE BARB FTG (GFP)
-	A3812	1	3/8MPT x 1/2" HOSE BARB FTG
-	BM3400	2	3/4" MPT NIPPLE FTG (GFP)
-	BTT34	1	3/4" FPTTEE (GFP)
-	UV075FP	1	3/4" FPT POLY BALL VALVE
-	B8H	2	1/2" SS GEAR CLAMP
-	B12H	2	3/4" SS GEAR CLAMP
-	340RD	-	3/4" I.D RUBBER HOSE (14 FT)
-	120RD	-	1/2" I.D. RUBBER HOSE (100 FT)

Please order replacement parts by PART NO. and DESCRIPTION

### ASSEMBLY INSTRUCTIONS

1. Bolt the mounting post (#12) to the axle, using two 1/2" x 3" square U-bolts (#5), and four 1/2" nylon insert locknuts (#6). When installing make sure you place the mounting post and the U-bolts between the two axle set screws.
2. Mount the outside hose reel bracket (#13) flush with the outside edge of the mounting post (#15) with one 3/8" x 2" square U-bolt (#4) and two 3/8" nylon insert locknut (#7). Mount the inside hose reel bracket on the other side of the vertical member of the mounting post (#15), leaving a 9" spacing between the bolts holes.
3. Place the hose reel (#10) on top of the mounts and secure with four 3/8" x 1" hex head bolts (#3) and four 3/8" nylon insert locknuts (#7).
4. The handgun storage bracket (#11) is already installed at the factory.

**NOTE:** Diagram shows left handed hose reel assembly, for clarity purposes. Hose reel may be mounted right handed style if desired.



Downtime caused by field breakdowns is costly and time consuming. Many breakdowns can be eliminated by periodic equipment maintenance. By spending time reviewing this checklist before seasonal spraying application time and following proper after-season care, you can save time and money later.



## **WARNING:** To Prevent Serious Injury Or Death

- Keep hands, feet, and loose clothing away from rotating parts.
- Wear protective clothing recommended by your chemical and fertilizer manufacturer when working with chemicals.

### Check Before Going To The Field :

#### 1. NOZZLES

Check tip for excessive wear by checking for grooves in or near tip opening. Check nozzle spacing by starting at center and working outwards. Check boom for proper height.

#### 2. HOSES

Check all hoses for worn or soft spots. Be sure all hose clamps are tightened and hoses are not kinked or pinched. Check for leakage in any lines.

#### 3. TANK

Remove and clean agitator orifices. Check orifices for excessive wear by checking for grooves in or near orifice opening. Inspect fitting and grommets to insure they are in good condition.

#### 4. CONTROLS

Check for leakage, plugging, or wear on all valves, fittings, etc. Clean off any build up of foreign material.

#### 5. PUMP

Check to be sure pump turns freely.

#### 6. FRAME

Be sure all bolts are tightened.

#### 7. REPLACEMENT PARTS

Replace all worn or damaged parts.

### After Season Care:

**NOTE:** It is important to wear proper safety equipment when cleaning the sprayer. See your chemical or fertilizer package for this information.

1. After spraying chemicals, run water mixed with cleaners through tank, pump and all hose hookups. If wettable powder dries out in the system, it is very difficult to put back into suspension and can cause malfunction, damage or injury.
2. When cleaned, tank should have all openings closed or covered to keep dirt from entering.
3. Pump should be flushed with soluble oil and pump ports plugged to keep out moisture and air.
4. Disassemble tips and rinse with water or cleaning solution. (Appropriate for chemical sprayed).
5. Clean tip opening with a wooden toothpick. Never use wire or hard object that could distort opening.
6. Dispose of all unused chemicals or solutions in a proper and ecologically sound manner.
7. Water rinse and dry tips before storing.

**NOTE:** DEMCO does not and will not make any recommendations concerning application of various chemicals or solutions. These recommendations relate to either amount or procedure of materials applied. If you have any questions regarding application of certain chemicals or solutions, contact your chemical supplier and follow chemical manufacturer recommendations.



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can be found online:**

**[www.demco-products.com](http://www.demco-products.com)**