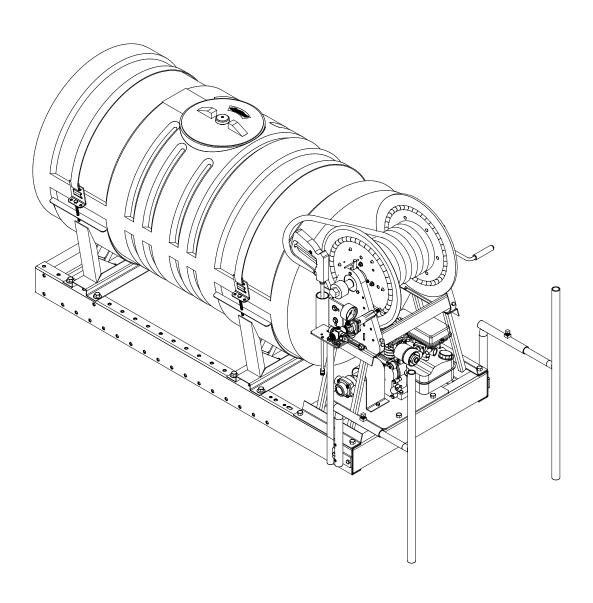


# **COMMUTER SPRAYER** SM110 & SM150



## **OPERATOR MANUAL**

Thank you for purchasing a Demco sprayer. We feel you have made a wise choice and hope you are completely satisfied with your new piece of equipment. If you have any questions regarding 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.



**WARNING:** TO AVOID PERSONAL INJURY OR PROPERTY DAMAGE, 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.
- Whenever terms "LEFT" and "RIGHT" are used in this manual it means from a position behind the sprayer and facing forward.
- 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 indicaed in this booklet.

Do not attempt to operate this equipment 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 equipment. Observe all safety signs and practice instructions on them.

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



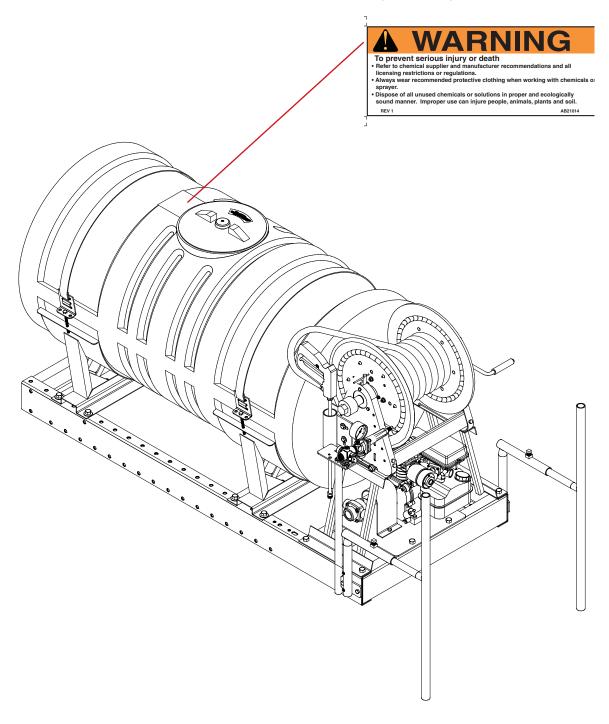
### **LIGHTING AND MARKING**

It is the responsibility of customer 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.



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.

This decal is located near the sprayer lid. Replacement part # is AB21014.





### 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.



### **BEFORE OPERATION:**

- Carefully study and understand this manual and the Owner's 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.)
- Give unit 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 unit until you are sure that area is clear, especially around children and animals.
- Don't hurry learning process or take unit for granted. Ease into it and become familiar with your new equipment.
- Practice operation of your equipment 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 seatbelt prior to starting the engine.
- Move wheels on the utility vehicle 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 utility 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 utility vehicle or equipment.
- Keep hands and clothing clear of moving parts.
- Do not clean, lubricate, or adjust your equipment while it is moving.
- When halting operation, even periodically, set utility vehicle brakes, disengage PTO, shut off engine, and **remove ignition key**.
- Be especially observant of operating area and terrain. Watch for holes, rocks, or other hidden hazards. Always inspect area prior to operation.
  - DO NOT operate near edge of drop-off or banks.
  - DO NOT operate on steep slopes as overturn may result.
  - Operate up and down (not across) intermediate slopes. Avoid sudden starts and stops.
- 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 sprayer of bruch, twigs, or other materials to prevent buildup of dry combustible materials.
- Maneuver utility vehicle at safe speeds.
- Avoid overhead wires. Contact with overhead lines could cause serious injury or death.
- Allow loose gravel, rocks, and holes; they can be dangerous for sprayer operation or movement.
- Allow for unit length when making turns.
- Do not walk or work under raised components or attachments unless securely supported.
- Keep all bystanders, pets, and livestock clean of work area.
- 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 utility vehicle, set brakes, disengage PTO all power drives, shut off engine and **remove ignition key**.
- Store unit in an area away from human activity.
- Do not park equipment 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 unit.



Make sure all parked machines are on a hard, level surface and engage all safety devices.

### 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. 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. Criss cross chains under tongue and secure to draw bar cage, mounting loops, or bumper frame.
- 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 utility 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 utilty vehicle and equipment 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 a which you are operating.
- Watch for obstructions overhead and side to side while transporting.



### 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.



### 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 utility vehicle in a closed building. Exhaust fumes may cause asphyxiation.
- Before working on this machine, stop utility 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 a 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 on page 10 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 step or platform.
- When replacing bolts refer to owners manual.
- Refer to bolt torque chart on page 10 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 sprayer.



### **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.

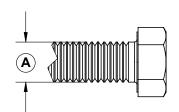
### **BOLT TORQUE DATA FOR STANDARD NUTS, BOLTS, AND CAPSCREWS.**

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 * |       |       |       |         |        |  |  |  |  |
|-------|----------------------------------|-------|-------|-------|---------|--------|--|--|--|--|
| //8// | GRA                              | DE 2  | GRA   | DE 5  | GRADE 8 |        |  |  |  |  |
| "A"   | 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" | CLAS                           | \$ 8.8 | CLAS  | S 9.8 | CLASS 10.9 |        |  |  |  |  |  |
| A   | 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) |  |  |  |  |  |





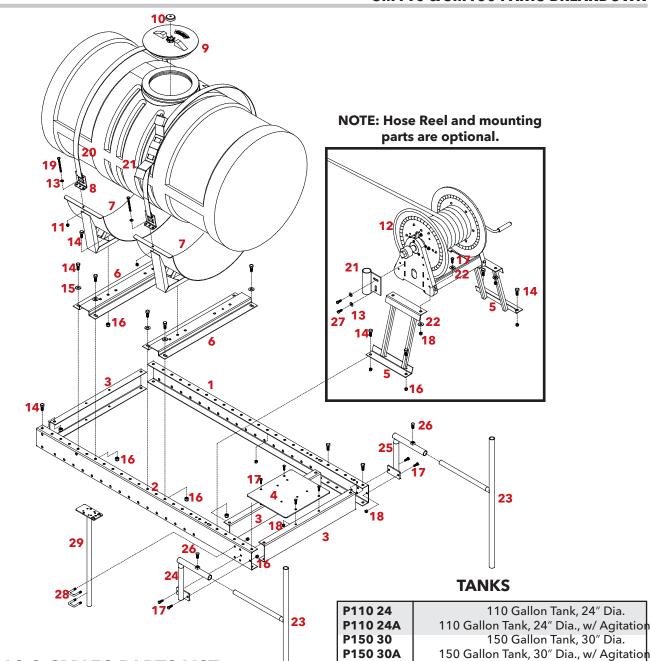












SM110 & SM150 PARTS LIST

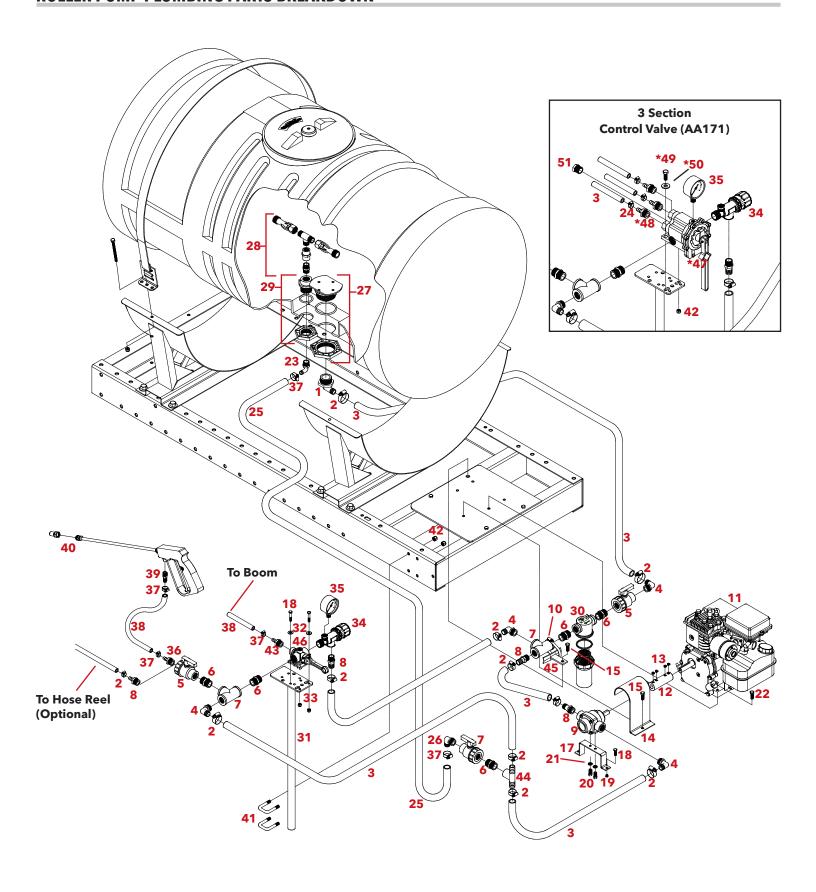
| REI<br>NC |          | QTY.   | DESCRIPTION                             |  |  |  |
|-----------|----------|--|---|--|--|--|
| 1.        | 07855-10 | 1  | Right Side Rail                         |  |  |  |
| 2.        | 07856-10 | 1  | Left Side Rail                          |  |  |  |
| 3.        | 03235-10 | 3  | Crossmember                             |  |  |  |
| 4.        | 07880-10 | 1  | Pump Mount Plate                        |  |  |  |
| 5.        | 07879-10 | 2  | Hose Reel Mount Bracket                 |  |  |  |
| 6.        | 03236-10 | 2  | Saddle Mount                            |  |  |  |
| 7.        | PS30     | 2  | 30" Dia. Saddles PS 30-30               |  |  |  |
| -         | PS24     | 2  | 24" Dia. Saddles PS 24-30               |  |  |  |
| 8.        | 05785-95 | 4  | Small Strap Anchor                      |  |  |  |
| 9.        | 5478R    | -  | 10" dia. Fillwell Cover (150 gal. Tank) |  |  |  |
| 10        | 5478V    | - Baffle Vent for 10" Fillwell Cover (repl.) |   |  |  |  |
| -         | PL5A     | 1  | 5" Cover for tank                       |  |  |  |
| 11        | 02802    | 6  | 5/16"-18 UNC Nylon Insert Locknut       |  |  |  |
| 12        | 03279    | 1  | Hose Reel                               |  |  |  |
| 13        | 00004    | 8  | 5/16" Flatwashers                       |  |  |  |
| 14        | 00967    | 24   | 1/2"-13 UNC x 1-1/4" Hex Hd. Bolt Gr.5  |  |  |  |
| 15        | 00085    | 8  | 1/2" Flatwasher                         |  |  |  |

Note: Gas Driven Units require Agitation

| REF.                  |                     | QTY. | DESCRIPTION                           |  |
|-----------------------|---------------------|------|---------------------------------------|--|
| 16.                   | 02178               | 24   | 1/2"-13 UNC Nylon Insert Locknut      |  |
| 17.                   | 00907               | 12   | 3/8"-16 UNC x 1" Hex Hd. Bolt Gr.5    |  |
| 18.                   | 02592               | 16   | 3/8"-16 UNC Nylon Insert Locknut      |  |
| 19.                   | 04352               | 4    | 5/16"-18 UNC x 4" Full Thread Bolt    |  |
| 20.                   | 09820               | 2    | 1-3/4" Polyester Strap (150 Gal Tank) |  |
| -                     | 04353               | 2    | 1-3/4" Polyester Strap (110 Gal Tank) |  |
| 21.                   | 03332-10            | 1    | Handgun Storage Bracket               |  |
| -                     | 05595-70            | 1    | Spray Wand Storage Bracket            |  |
| 22.                   | 00059               | 16   | 3/8" Flatwasher                       |  |
| 23.                   | 04347-70            | 2    | Boom Mounting Arms                    |  |
| 24. <b>04346-70</b>   |                     | 1    | Left Boom Mount                       |  |
| 25.                   | 25. <b>04348-70</b> |      | Right Boom Mount                      |  |
| 26.                   | 00095               | 2    | 3/8"-16 UNC x 3/4" Set Screw          |  |
| 27.                   | 02990               | 2    | 5/16"-18 UNC x 1" Bolt, Gr.5          |  |
| 28.                   | 02529               | 2    | 3/8"-16 UNC x 2-1/2" Round U-bolt     |  |
| 29. <b>09275-10</b> 1 |                     | 1    | Control Valve Mount                   |  |

Please order replacement parts by PART NO. and DESCRIPTION.

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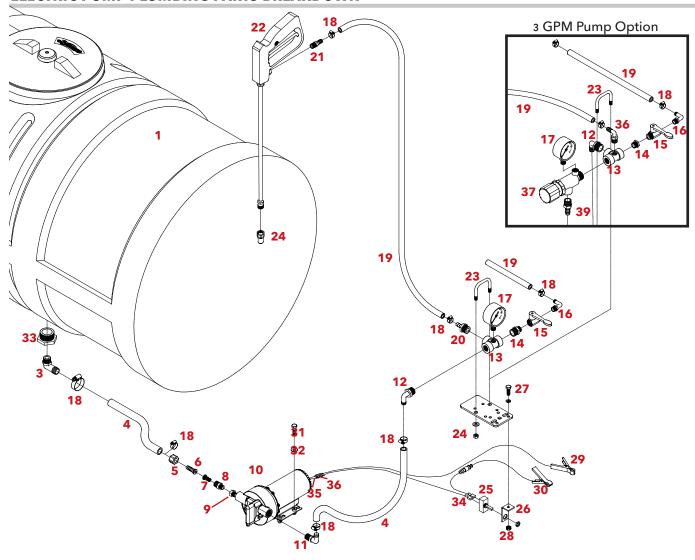
| REF.<br>NO. | PART<br>NO. O | TY. | DESCRIPTION                             |
|-------------|---------------|-----|---|
| 1.          | EL114 34      | 1   | 1-1/4" MPT x 3/4" Elbow                 |
| 2.          | B12H          | 10  |   |
| 3.          | 340RB         | -   | 3/4" Rubber Hose                        |
| 4.          | BEL3434       | 4   | 3/4" MPT x 3/4" Elbow                   |
| 5.          | UV075FP       | 3   | 3/4" Poly Ball Valve                    |
| 6.          | BM3400        | 5   | 3/4" MPT Nipple Fitting                 |
| 7.          | BTT34         | 2   | 3/4" FPT Tee Fitting (GFP)              |
| 8.          | BA3434        | 3   | 3/4" MPT x 3/4" Hose Barb Fitting (GFP) |
| 9           | .C4101        | 1   | Roller Pump                             |
| 10.         | B20H          | 2   | 1-1/4" Hose Clamp                       |
| 11.         | GE3HP         | 1   | 3.5 HP Briggs & Stratton Gas Engine     |
| -           | GH4HP         | 1   | 4 HP Honda Gas Engine (optional)        |
| 12.         | 04880-95      | 1   | Pump/Engine Coupler                     |
| 13.         | 07174         | 4   | 1/4" UNC x 3/4" Square Head Set Screw   |
| 14.         | 02653-70      | 1   | Shaft Shield                            |
| 15.         | 02990         | 1   | 5/16"-18 UNC x 1" Hex Head Bolt         |
| 16.         | 02802         | 5   | 5/16"-18 UNC Nylon Insert Locknut       |
| 17.         | 02660-70      | 1   | Roller Pump Mounting Bracket            |
| 18.         | 04055         | 4   | 1/4"-20 UNC x 1" Hex Hd. Bolt, Gr. 5    |
| 19.         | 01872         | 2   | Rubber Bumper                           |
| 20.         | 04305         | 2   | 5/16"-18 UNC x 1/2" Hex Head Bolt       |
| 21.         | 00036         | 2   | 5/16" Lockwasher                        |
| 22.         | 00372         | 4   | 5/16"-18 UNC x 1-1/2" Hex Hd Bolt Gr.5  |
| 23.         | BEL1212       | 1   | 1/2" MPT x 1/2" Elbow Fitting (GFP)     |
| 24.         | B12H          | 8   | 3/4" Hose Clamp (Qty. 14 on 3-Section)  |
| 25.         | 120RB         | -   | 1/2" I.D. Rubber Hose                   |
| 26.         | BEL3412       | 1   | 3/4" MPT x 1/2" Hose Barb Elbow (GFP)   |

| 27. | P114AV   | 1 | 1-1/4" Tank Outlet Fitting Assembly           |  |
|-----|----------|---|---|--|
| -   | 5078V    | 1 | Large Viton O-ring                            |  |
| 28. | P012DA   | 1 | 1/2" Polyethylene Tank Fitting                |  |
| -   | 5077V    | 1 | Small Viton O-ring                            |  |
| 29. | D3371PSA | 1 | Tank Double Agitation Assembly                |  |
| -   | R1212    | 1 | 1/2" MPT Tee                                  |  |
| -   | 5044 1   | 1 | Jet Agitation Wand, , Nylon, .50" FPT x75 MPT |  |
| -   | FC1200   | 1 | 1/2" FPT Coupling                             |  |
| -   | M1200    | 1 | 1/2" MPT Short Nipple                         |  |
| 30. | RVF34 80 | 1 | 3/4" Line Strainer w/ 80 Mesh Screen          |  |
| -   | RVF34C   | 1 | Strainer Cap                                  |  |
| -   | RVF380   | 1 | 80 Mesh Screen                                |  |
| -   | RVF34GV  | 1 | Viton O-ring                                  |  |
| -   | RVF34B   | 1 | Strainer Bowl                                 |  |

| 24   | 00075.40 | 4 | [C   17/1 M   1                    |  |
|------|----------|---|------------------------------------|--|
| 31.  | 09275-10 | 1 | Control Valve Mount                |  |
| 32.  | 00214    | 4 | 1/4" Flatwasher                    |  |
| 33.  | 02772    | 4 | 1/4"-20 UNC Nylon Insert Locknut   |  |
| 34.  | 23340PP  | 1 | Pressure Relief Valve              |  |
| 35.  | 160GB    | 1 | 160 lb. Brass Gauge                |  |
| 36.  | A3438    | 1 | 3/4" MPT x 3/8" Hose Barb Fitting  |  |
| 37.  | В6Н      | 6 | 3/8" Hose Clamp SS                 |  |
| 38.  | 380RB    | - | 3/8" I.D. Rubber Hose              |  |
| 39.  | A1438    | 1 | 1/4" MPT x 3/8" Hose Barb          |  |
| 40.  | 12434    | 1 | Spray Wand                         |  |
| -    | 12496    | - | Spray Wand Tip for Gas Driven Pump |  |
| 41.  | 02529    | 2 | 3/8"-16 UNC x 1-1/2" U-bolt        |  |
| 42.  | 02592    | 4 | 3/8"-16 UNC Nylon Insert Locknut   |  |
| 43.  | A1238    | 1 | 1/2" MPT x 3/8" Hose Barb          |  |
| 44.  | T34F     | 1 | 3/4" FPT x 3/4" Hose Barb          |  |
| 45.  | 05596-95 | 1 | Tee Mount Bracket                  |  |
| 46.  | 6B1      | 1 | 3/4" FPT Direct-O-Valve            |  |
| -    | AB6B1    | - | Direct-O-Valve Repair Kit          |  |
| *47. | AA17I    | 1 | 3/4" FPT Tee Valve                 |  |
| *48. | BA3412   | 3 | 1/2" MPT x 3/4" Hose Barb          |  |
| *49. | 00523    | 2 | 3/8"-16 UNC x 1-1/4" Hex Head Bolt |  |
| *50. | 00059    | 4 | 3/8" Flatwasher                    |  |
| *51. | F1000    | 1 | 1" MPT Plug                        |  |

Please order replacement parts by PART NO. and DESCRIPTION.

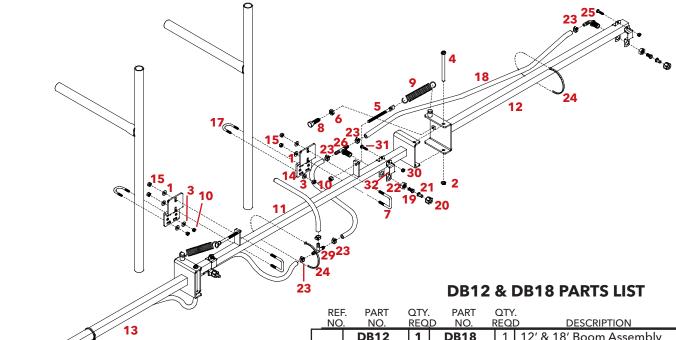
### **ELECTRIC PUMP PLUMBING PARTS BREAKDOWN**



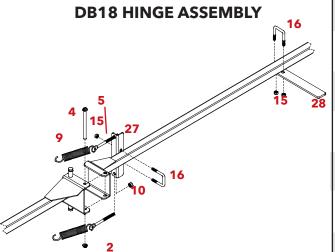
### **ELECTRIC PUMP PLUMBING PARTS LIST**

| REF. | PART<br>NO.    | QTY. | DESCRIPTION                             |
|------|----------------|------|---|
| 1.   | P110 24        | 1 1  | 110 gal. Poly Tank, 24" Diameter        |
| 1.   | P150 30        |      | 150 gal. Poly Tank, 30" Diameter        |
| '    | PL5A           | 1 1  | Cover for tank                          |
| -    | 5478R          |      | 10" Dia. Fillwell Cover (150 gal. Tank) |
| -    |                | -    | Baffle Vent for Fillwell Cover 5478R X  |
| 1 -  | 5478V<br>05020 | -    |   |
| 2.   |                | 2    | 14 GA. Male Bullet Connector            |
| 3.   | BEL3412        | 1    | 3/4" MPT x 1/2" Hose Barb Elbow         |
| 4.   | 120RB          | -    | 1/2" I.D Rubber Hose                    |
| 5.   | 8027           | 1    | Swivel Nut                              |
| 6.   | K8400 1/2      | 1    | 1/2" Hose Barb                          |
| 7.   | 8079NY         | 1    | 50 Mesh Poly Strainer                   |
| 8.   | NB1614         | 1    | 1/4" MPT x11/16" MPT Strainer Fitting   |
| 9.   | RB3814         | 1    | 3/8" MPT x 1/4" FPT Reducer Fitting     |
| 10.  | 12981          | 1    | 5 GPM, 12VDC Pump                       |
| 11.  | EL3812         | 1    | 3/8" MPT x 1/2" Hose Barb Elbow         |
| 12.  | BEL1212        | 1    | 1/2" MPT x 1/2" Hose Barb Elbow         |
| 13.  | BTT12G         | 1    | 1/2" FPT Tee (Tapped for Gauge)         |
| 14.  | BM1238         | 1    | 1/2" MPT x 3/8" Reducer Nipple          |
| 15.  | 03900          | 1    | 3/8" FPT x 3/8" FPT Valve               |
| 16.  | EL3838         | 1    | 3/8" MPT x 3/8" Hose Barb               |
| 17.  | 60GB           | 1    | 60lb. Pressure Gauge                    |
| 18.  | В6Н            | 8    | 3/8" Hose Clamp SS                      |
| 19.  | 380RB          | -    | 3/8" I.D. Rubber Hose                   |

| REF. | PART        |     |                                       |
|------|-------------|-----|---------------------------------------|
| NO.  | NO.         | QTY |                                       |
| 20.  | A1238       | 1   | 1/2" MPT x 3/8" Hose Barb             |
| 21.  | A1438       | 1   | 1/4" MPT x 3/8" Hose Barb             |
| 22.  | 30L22425 18 | 1   | 18" Hand Spray Wand                   |
| 23.  | 00955       | 1   | 1/4" UNC x 1" x 2" Round U-bolt       |
| 24.  | 5500 6PP    | 2   | Spray Wand Tip for Electric Pump      |
| 25.  | 01013       | 1   | Switch                                |
| 26.  | 04755-95    | 1   | Switch Mount                          |
| 27.  | 04055       | 1   | 1/4"-20 UNC x 1" Hex Head Bolt        |
| 28.  | 02772       | 7   | 1/4"-20 UNC Nylon Insert Locknut      |
| 29.  | 02447       | 1   | Red Battery Clamp (+)                 |
| 30.  | 02448       | 1   | Black Battery Clamp (-)               |
| 31.  | 00336       | 4   | 1/4"-20 UNC x 1-1/4" Hex Head Bolt    |
| 32.  | 00214       | 4   | 1/4" Flatwasher                       |
| 33.  | BRB114 34   | 1   | 1-1/4" MPT x 3/4" FPT Reducer Bushing |
| 34.  | 05004       | 2   | Push On Female Terminal               |
| 35.  | 05020       | 2   | 14-16 GA Male Bullet Connector        |
| 36   | 05021       | 2   | 14-16 GA Female Bullet Connector      |
| 37.  | 23120PP     | 1   | 1/2" NPT Pressure Relief Valve        |
| 38.  | EL1438      | 1   | 1/4" MPT x 3/8" Hose Barb Elbow       |
| 39.  | BA1212      | 1   | 1/2" MPT x 1/2" Hose Barb             |



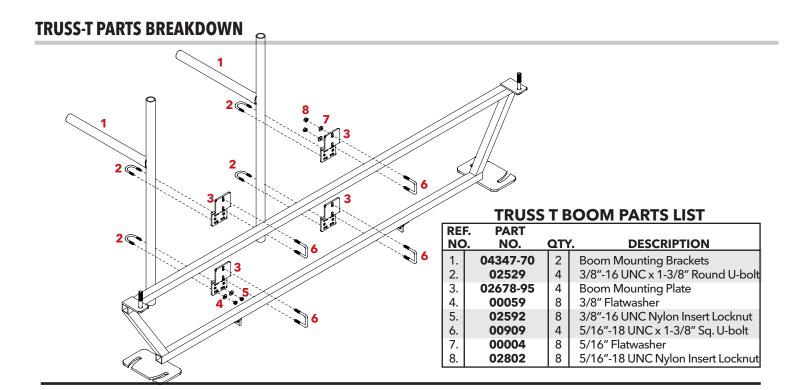
NOTE: The mounting brackets (#14) and attaching hardware are used to mount the 18' Boom in the same manner.



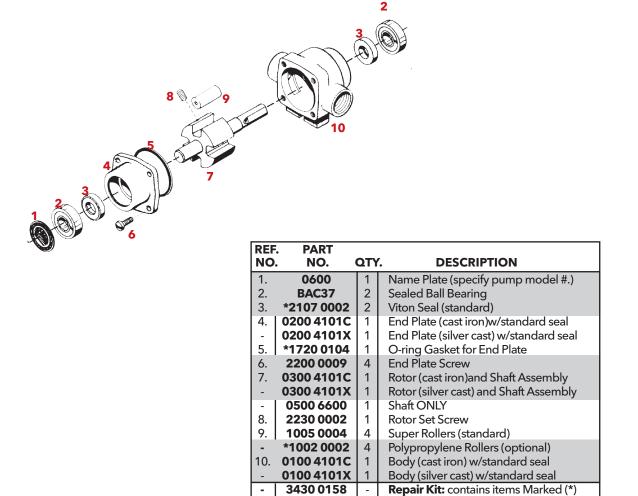
| REI      |           | QTY |           | QTY  |                                     |
|----------|-----------|-----|-----------|------|-------------------------------------|
| NO       |           | REQ |           | REQI |                                     |
| <u> </u> | DB12      | 1   | DB18      | 1    | 12' & 18' Boom Assembly             |
| 1.       | 00004     | 4   | 00004     | 4    | 5/16" Flatwasher                    |
| 2.       | 00009     | 2   | 00009     | 2    | Cotter Pin (1/8" x 1")              |
| 3.       | 00059     | 8   | 00059     | 8    | 3/8" Flatwasher                     |
|          | 00340-95  | 2   | 00340-95  | 2    | Wing Hinge Pin                      |
| 5.       | 00357     | 2   | 00357     | 4    | 3/8"-16 UNC x 4-1/2" Tension Bolt   |
| 6.       | 00640     | 2   | 00640     | 2    | 1/2" - 13 UNC Jam Nut               |
| 7.       | 00909     | 2   | 00909     | 5    | 5/16" x 1-3/8" Sq. U-Bolt           |
| 8.       | 00967     | 2   | 00967     | 2    | 1/2" - 13 UNC x 1-1/4" Hex Head     |
| 9.       | 01564     | 2   | 01564     | 4    | Spring                              |
| 10.      | 02592     | 6   | 02592     | 8    | 3/8" - 16 UNC Nylon Insert Locknut  |
|          | 02636-10  | 1   | 03673-10  | 1    | Center Boom Section                 |
|          | 02637-10  | 1   | 03675-10  | 1    | Right Wing Section                  |
| 13.      | 02638-10  | 1   | 03680-10  | 1    | Left Wing Section                   |
| 14.      | 02678-95  | 2   | 02678-95  | 2    | Boom Mounting Plate                 |
| 15.      |           | 8   | 02772     | 14   |                                     |
| 16.      | -         | -   | 04822     | 3    | 1/4" - 20 UNC x 1-1/2" Sq. U-Bolt   |
| 17.      | 02529     | 2   | 02529     | 2    | 3/8" - 16 UNC x 1-1/2" Round U-Bolt |
| 18.      | 380RB     | -   | 380RB     | -    | 3/8" I.D. Rubber Hose               |
| 19.4     | 4193APP50 | 44  | 1193APP50 | 6    | 5 PSI Ball Check Valve              |
| 20.      | 8027      | 4   | 8027      | 6    | 11/16" FPS Swivel Nut               |
| 21.      | AN1.5     | 4   | AN1.5     | 6    | Flood Jet Spray Tip                 |
| 22.      | B12       | 4   | B12       | 6    | Nozzle Nut                          |
| 23.      | B6H       | 8   | В6Н       | 12   | 3/8" Gear Clamp                     |
| 24.      | NHT11     | 3   | NHT11     | 12   | Hose Tie                            |
| 25.      | NTL38     | 2   | NTL38     | 2    | 3/8" Elbow Spray Nozzle Fitting     |
| 26.      | NTT38     | 2   | NTT38     | 4    | 3/8" Tee Nozzle Fitting w/nut       |
| 27.      | -         | -   | 03674-10  | 2    | Spring Anchor Angle (DB18 Only)     |
| 28.      | -         | -   | 03676-10  | 1    | Boom Support Plate (DB18 Only)      |
| 29.      | T38       | 1   | T38       | 1    | 3/8" Insert Tee                     |

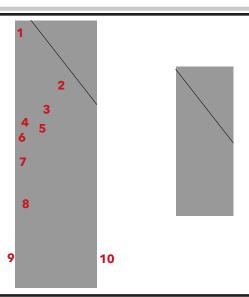
|   | B11 114            | 4 | B11 114  | 6 | 1-1/4" Boom Clamp Assembly      |
|---|--------------------|---|----------|---|---------------------------------|
| 3 | 0. <b>00062</b>    |   |          |   | 1/4"-20 UNC Nut                 |
|   | 1. 00068           | 1 | 00068    | 1 | 1/4"-20 UNC x 3/4" Hex Hd. Bolt |
| 3 | 2. <b>00337-95</b> | 2 | 00337-95 | 2 | 1-1/4" Boom Clamp               |

Please order replacement parts by PART NO. and DESCRIPTION.



### (C4101 & XL4101) ROLLER PUMP PARTS LIST



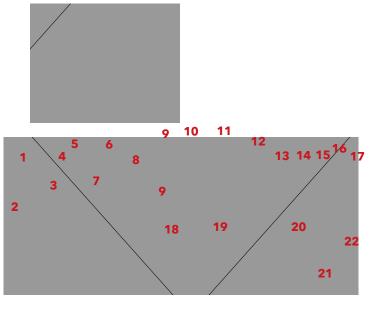


### (6B1) DIRECT-O- VALVE PARTS LIST

| (ODI) DIRECTO TALTETARIS EIST                 |              |                                       |
|---|--------------|---------------------------------------|
| REF.  | PART         |                                       |
| NO.   | NO.          | DESCRIPTION                           |
| 1.  | 36301NY      | Handle (Nylon)                        |
| 2.  | 36308SS      | Groove Pin (Stainless Steel)          |
| 3.  | 36302PP      | Body Insert (Polypropylene)           |
| *4.   | 7717 2 108VI | O-ring (Viton)                        |
| 5.  | 36307SS      | Washer (Type 316, Stainless Steel)    |
| *6.   | 7717 2 209VI | O-ring (Viton)                        |
| 7.  | 36306SS      | Spring (Type 316, Stainless Steel)    |
| 8.  | 36305        | Stem (Stainless Steel & Polyethylene) |
| 9.  | 36303PP      | Body (Polypropylene)                  |
| 10.   | 36309SS      | Retaining Clip (Stainless Steel)      |
| AB6B1 Spare Parts Kit (includes items with *) |              |                                       |

Please order replacement parts by PART NO. and DESCRIPTION.

### (AA17I) TEE VALVE PARTS BREAKDOWN



| (AA17I) TEE VALVE PARTS LIST                 |                    |  |  |
|--|--------------------|--|--|
| REF.   | PART               |  |  |
| NO.  | NO.                | DESCRIPTION  |  |
| 1.   | 8012 1/2SS         | 1/16" x 1/2" Cotter Pin, stainless steel                                     |  |
| 2.   | 6849IZP            | Handle, steel & zinc plated  |  |
| 2.A  | 15490SS            | Rivet, stainless steel   |  |
| * 3.   | 7206IZP            | Rivet, steel, zinc plated  |  |
| * 4.   | 6976IZP            | Handle Washer, steel, zinc plated  |  |
| 5.   | 12128IZP           | Selector Shield, steel, zinc plated  |  |
| <b>*</b> 6.                                  | 12127CE            | Selector Shield Tip, celcon  |  |
| 7.   | 12129CE            | Spacer, celcon   |  |
| 8.   | 6972SS             | Main Stem, stainless steel   |  |
| * 9.   | 7980IZP            | Screw, steel, zinc plated (8 required)                                       |  |
| 10.  | 12126AL            | Cover Plate, aluminum  |  |
| * 11.  | 6975BU             | Gasket, buna-N   |  |
| * 12.  | 5809LEA            | Packing, thermo-leather (5 required)   |  |
| 13.  | 12130SS            | Packing Gland, stainless steel   |  |
| 14.  | 7254SS             | Main Spring, stainless steel   |  |
| 15.  | 7987SS             | Washer, stainless steel  |  |
| 16.  | 6971AL             | Selector Cam, aluminum   |  |
| 17.  | 6973SS             | Guide Nut, stainless steel   |  |
| 18.<br>19.                                   | 6959SS             | Valve Spring, stainless steel (3 req'd.)                                     |  |
| 20.  | 6956CE<br>6934 6AL | Valve Stem, celcon (3 required)  |  |
| ∠0.<br> * 21.                                |                    | Body, aluminum   |  |
| 22.  | 6958POL<br>7262AL  | Seat Plate, polyethylene (3 required)  |  |
|  | AB17               | Outer Adapters, aluminum (required)  Spare Parts Kit (includes items with *) |  |
| AB17 Spare Parts Kit (includes items with *) |                    |  |  |

### **SPRAYER CHECKLIST:**

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.

- 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.

recommendations.

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

### SPRAYER CHECKLIST:

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#### 5 DIIMP

Check to be sure pump turns freely.

#### 6. FRAME

Be sure all bolts are tightened.

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Replace all worn or damaged parts.

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