

# BLUE BERRY SPRAYER

300 AND 500 GALLON



The VAN'S BLUEBERRY sprayer is offered in 500 gallon oval tank and 300 gallon round horizontal tank. This sprayer can be used in other applications, such as but not limited to olives, citrus and nurse applications. There are numerous configurations of column and gun setups. The frames come with standard 53" uprights or tall 77" uprights. An adjustable center section available to fit most any width requirements.

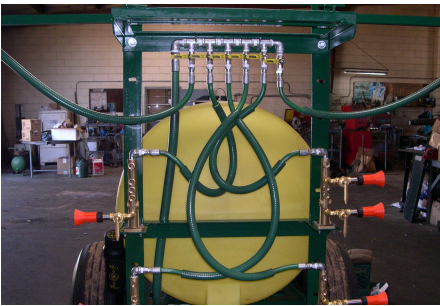
<b>MODEL NO.</b>	<b>T5001</b>	BOTH SIDES TWO COLUMN SIX GUN
<b>MODEL NO.</b>	<b>T5002</b>	ONE SIDE TWO COLUMN THREE GUN
<b>MODEL NO.</b>	<b>T3001</b>	BOTH SIDES TWO COLUMN SIX GUN
<b>MODEL NO.</b>	<b>T3002</b>	ONE SIDE TWO COLUMN THREE GUN

#### Standard Features Include:

- (1) 500 gallon oval tank
- (2) 300 gallon round tank
- (3) Udor Omega – 140 Diaphragm pump
- (4) Quick fill
- (5) 5 Year structural warranty
- (6) 11L-15 implement tires
- (7) Fully assembled and factory tested

#### OPTIONS

- (1) Hand gun with rewind reel
- (2) Adjustable center section
- (3) Extra Height Upright



*We Appreciate You and Your Business!*

**EQUIPMENT COMPANY**

(229) 985-1101  
P.O. BOX 3157 • 2169 SYLVESTER HIGHWAY • MOULTRIE, GEORGIA 31776-3157

(PRICES SUBJECT TO CHANGE WITHOUT NOTICE)

**VAN'S EQUIPMENT  
BUILT FOR FARMING INTEGRITY**

**WHEN SELECTING EQUIPMENT FOR FARMING THE NAME VAN'S means availability, reliability, and proven superiority. Maintaining a close association with farming customers has resulted in equipment design and manufacturing philosophy that reflects the exacting requirements of our customers.**

**Van's Equipment Company, Inc. appreciates your purchase of a new spray unit. This unit, is designed to give years of service with proper care. The following pages will be helpful in set-up and maintenance of your new unit.**

**PLEASE READ THIS MANUAL CAREFULLY BEFORE INITIAL START-UP IS ATTEMPTED.**

**WE APPRECIATE YOU  
AND YOUR BUSINESS**

**FOR DIAPHRAGM PUMPS:**

Always mount pump with the oil sight tube in an upwards position. DO NOT OPERATE without safety shields in place.

**BEFORE RUNNING THE PUMP:**

- A. Be sure that oil is halfway up the sight tube. If necessary, fill to correct level with 20W-30W non detergent oil.
- B. Be sure the suction hose barb is tightly screwed onto the suction union.
- C. Do not restrict the pump on the suction side. Use a 2-braid suction hose of at least the same inside diameter as the pump ports—larger with long suction lines. Keep the line as short as possible. Avoid all unnecessary bends, elbows or kinks in hose. Make sure all connections are tight and do not leak air.
- D. Be sure to use line strainer with 20 mesh, this comes standard on any VAN,S sprayer with diaphragm pumps
- E. Be sure to check charge in pulsation damper. Damper should be charged with air to 20 % of operating pressure. Minimum charge should be 5 PSI.
- F. RUN THE PUMP AT ZERO PRESSURE for one minute to remove air from the system. Do not exceed the pump's recommended maximum speed and pressure. There will be no performance advantage and pump life will be reduced. Pumps run over recommended speed or pressure are not subject to warranty.
- G. MAINTENANCE:
  - 1. After use, flush pump with clean water.
  - 2. Change oil every 200 hours or at the end of every spray season. To drain oil from pump, remove the drain plug, (see manufacturers manual), and slowly turn pump shaft until all oil is drained. To fill pump with oil, slowly pour oil into sight tube while turning the pump shaft. Turning the pump shaft purges air out of the crankcase.
  - 3. For winter storage or if freezing conditions will be encountered, flush pump with 50/50 mixture of water and antifreeze.

**NOTES TO REMEMBER FOR ALL PUMPS:**

- A. Be sure to check all arrows on the pump that indicate proper rotation of pump.
- B. Be sure pump is correct for the PTO speed you intend to use.
- C. Be sure that the suction hose from tank to pump is as short as possible—cut if necessary—and be sure that hose is not kinked or collapsed—run it as straight as possible.
- D. Be sure that all hose clamps are tight and in place.
- E. **NEVER OPERATE ANY SPRAYER PUMP DRY**—Be sure pump is primed and supplied with liquid when it is operating. Damage will occur to the seals in a roller pump and also to the rollers. Damage will occur to seal of a centrifugal pump if operated dry.

When starting a new pump and every time it is operated thereafter, the pump should start displacing liquid within 18 seconds. If it does not, stop the pump and check all hoses, valves, and strainer between pump and tank.

**BEFORE GOING TO THE FIELD:**

1. Look inside your new sprayer tank and make sure it is clean.
2. Fill tank about half full with clean water—DO NOT ADD ANY CHEMICALS.
3. Make sure all valves in the suction line on bottom of tank are full open.
4. Turn adjusting screw on pressure regulator valve in the counter-clockwise direction until it is almost all the way out.
5. Start pump slowly and increase speed of tractor to about 1200 RPM while checking to make sure liquid is passing through the pump and back into tank.
6. Turn adjusting screw on pressure regulator clockwise and increase pressure to approximately 10 PSI above the pressure you expect to use in field.
7. Open boom control valve and check all fittings for possible leaks. Check all hose connections and make sure all clamps are tight.
8. **MAKE SURE AT NO TIME WILL THE PRESSURE EXCEED THE CAPACITY OF THE PRESSURE GAUGE.**
9. Inspect the inside of your tank for good agitation while pump is in operation. Your VAN,S Sprayer gives full time agitation while pump is running. If you do not have good agitation, it is possible that some piece of foreign material can enter the system and clog agitator. Check if necessary by removing the agitator for inspection.

If the preceding steps have been followed properly and all corrective action necessary has been taken, you are now ready to calibrate your unit for field operation.

**CAUTIONS AND PRE-CAUTIONS,(PLEASE READ CAREFULLY)**

If you have followed all the instructions up to this point, your new VAN'S SPRAYER is ready to go to work and do a good job. These last instructions can and will make your spraying job more pleasant.

- A. NEVER OPERATE SPRAYER WITHOUT PROPER SAFETY PRECAUTIONS.**
- B. ALWAYS FILL TANK AT LEAST HALF FULL AND HAVE PUMP OPERATING BEFORE ADDING CHEMICALS. IF YOU ARE USING WETTABLE POWDER,PRE-MIX IN A BUCKET OF WATER BEFORE ADDING TO TANK.**
- C. NEVER OPERATE PUMP AFTER TANK IS EMPTY-DO NOT OPERATE DRY.**
- D. ALWAYS ADJUST PRESSURE REGULATOR WITH SPRAYER IN OPERATION AND NEVER EXCEED THE CAPACITY OF THE GAUGE.**
- E. NEVER USE A METAL OBJECT TO CLEAN A NOZZLE,A TOOTHPICK,TOOTHBRUSH,MATCH,OR AIR WILL DO A BETTER AND SAFER JOB.**
- F. WHEN TRANSPORTING YOUR SPRAYER ON A ROAD OR HIGHWAY,BE SURE TO SECURE THE BOOMS IN THE BRACKETS PROVIDED FOR THIS PURPOSE. ALWAYS USE FLASHER LIGHTS OR OTHER DEVICES TO GIVE ADEQUATE WARNING TO OTHER VEHICLES.**
- G. REMEMBER-NOZZLES DO WEAR CAUSING SPRAY PATTERN DISTORTION AND VARYING SPRAY VOLUME RATES.REPLACE NOZZLES AS OFTEN AS NEEDED TO ASSURE PROPER AND UNIFORM SPARY COVERAGE AND RATES. CALIBRATE DAILY. STAINLESS STEEL NOZZLES PROVIDE THE MOST WEAR RESISTANCE WHEN COMPARED TO OTHER TIP MATERIAL.**
- H. ALWAYS USE CLEAN WATER AND CHECK STRAINER DAILY.**

- I. **CHECK AGITATION IN TANK FREQUENTLY—AT LEAST TWICE DAILY.**
- J. **KEEP ALL HOSES IN GOOD SHAPE – REPLACE WORN OR DAMAGED HOSE AS NEEDED-BE SURE SUCTION HOSE IS IN GOOD CONDITION.**
- K. **CLEAN UP WHEN JOB IS DONE.ALWAYS CLEAN SPRAYER AFTER EACH USE.**
- L. **NEVER CHANGE FROM ONE CHEMICAL TO ANOTHER WITHOUT THOROUGHLY CLEANING SPRAYER.**

#### **CLEANING- STORING-MAINTENANCE**

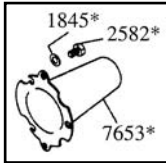
The least expensive thing you can do to prolong your new sprayers life is to keep it clean. Please follow these simple instruction after spraying job is done.

1. Clean thoroughly-Remove any chemical residues from tank,pump,boom strainers,and nozzles by flushing completely the entire system with clean water and follow with a solution of approximately ONE QUART of household AMMONIA to25 gallons water.
2. Remove all nozzle tips and strainers from booms and clean thoroughly with a toothbrush or toothpick. Leave nozzle tip to soak in can of oil or diesel fuel.
3. DRAIN TANK COMPLETELY and leave it to dry outside. Make sure all chemical has been removed THIS IS VERY IMPORTANT WITH WETTABLE POWDERS.
4. Remove pump and make sure no liquid is left inside. Fill pump with radiator rust inhibitor and plug outlets keep inside during storage.
5. Drain complete system and fill with antifreeze during winter storage to prevent freezing.
6. Store complete sprayer in dry place out of weather. Keeping sprayer out sunlight will lessen the UV effects on tank.
7. Caution: Never change from one type of chemical to another without thoroughly cleaning sprayer.

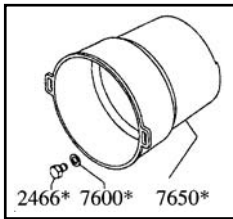


# OMEGA-140/CC

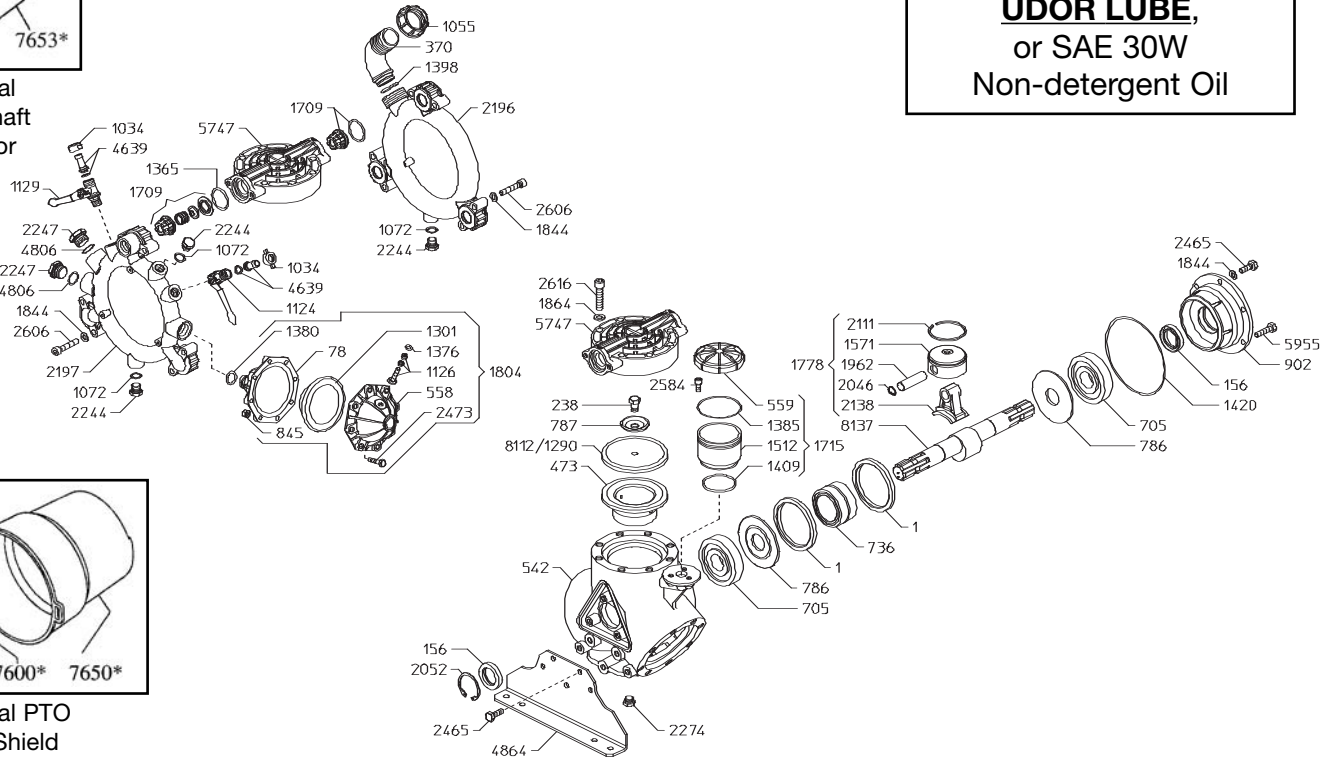
## Exploded View Diagram and Parts List



\*Optional  
Thru-Shaft  
Protector



\*Optional PTO  
Safety Shield



### OMEGA-140/CC PUMP

Requires **87 oz.**

**UDOR LUBE,**

or SAE 30W

Non-detergent Oil

REF#	PART#	DESCRIPTION	QTY	REF#	PART#	DESCRIPTION	QTY
1	0001.01	Retainer Rings	2	1715	6033.02	Oil Reservoir Assy.	1
78	0003.12	Lower Accumulator	1	1778	6015.01	Piston/Rod Assy.	3
156	0007.02	Shaft Seal	2	1804	6031.02	Accumulator	1
238	0102.03	Diaphragm Bolt	3	1844	1403.09	Washer	16
370	0202.72	Suction Elbow	1	*1845	1403.10	Washer	3
473	0206.49	Piston Sleeve	3	1864	1403.45	Washer	24
558	0208.21	Upper Accumulator	1	1962	1502.01	Wrist Pin	3
542	0209.91	Pump Body	1	2046	1506.02	Snap Ring	6
559	0208.22	Oil Cap	1	2052	1506.16	Snap Ring	1
705	0214.11	Ball Bearing	2	2111	1509.05	Piston Ring	3
736	0216.02	Needle Bearing	1	2138	1519.03	Connecting Rod	3
786	0301.02	Spacer	2	2196	1601.28	Suction Manifold	1
787	0301.03	Diaphragm Washer	3	2197	1605.32	Discharge Manifold	1
845	0303.01	Nut	8	2244	1603.64	Plug	2
902	0501.46	Bearing Flange	1	2247	1603.74	Plug	2
1034	0604.09	Barb Nut	2	2465	1804.03	Bolt	8
1055	0604.50	Suction Nut	1	*2466	1804.06	Bolt	3
1072	0605.09	Gasket	2	2274	1603.44	Drain Plug	1
1124	0608.45	Ball Valve Right	1	*2582	1805.04	Bolt	3
1126	0608.16	Air Valve Assy.	1	2584	1805.06	Bolt	3
1129	0608.46	Ball Valve Left	1	2606	1805.29	Manifold Bolt	12
1290	0903.01	Piston Diaphragm BUNA optional	3	2616	1805.38	Head Bolt	24
**1301	0903.16	Accumulator Diaphragm	1	4639	0202.19	Discharge Barb	2
**1365	1101.01	O-Ring	6	4806	1101.G3	O-Ring	2
1376	1101.16	O-Ring	1	4864	1202.82	Pump Rail	2
1380	1101.25	O-Ring	1	5747	1604.B7	Pump Head	3
1385	1101.32	O-Ring	1	5955	1804.23	Bolt	2
1398	1101.42	O-Ring	1	*7600	1403.36	Washer	3
1409	1101.68	O-Ring	1	*7650	1219.02	PTO Safety Shield *optional	1
1420	1101.71	O-Ring	1	*7653	1219.15	Shaft Protector Thru Shaft *optional	1
1512	1203.30	Oil Reservoir	1	**8112	0903.33	Diaphragm DESMOPAN Standard	3
1571	1205.08	Piston	3	8137	0002.A6	Crankshaft	1
1709	6006.08	Valve Assy.	6				

\* Parts Included in Diaphragm Repair Kit - #8700.06. (Also available in BUNA-N - #8700.17.)



# OMEGA-140/CC

## High Pressure Diaphragm Pump

OMEGA-140/CC 3-cylinder high pressure, high volume diaphragm pumps are excellent for various horticultural and agricultural spraying applications. Simplicity of design and common parts allow easy and affordable maintenance. Control valve, pulsation dampener and pressure gauge are standard.

The OMEGA-140/CC is constructed of plasticized aluminum, brass and stainless steel with plasticized aluminum, brass and stainless steel liquid handling parts.

For industrial uses and spraying applications not listed, please consult UDOR U.S.A. For all PTO drive applications safety shield part #1219.02 is recommended.

Splined Q-2 bushing for pulley drive is available upon request. For thru shaft protection part #1219.15 is recommended.

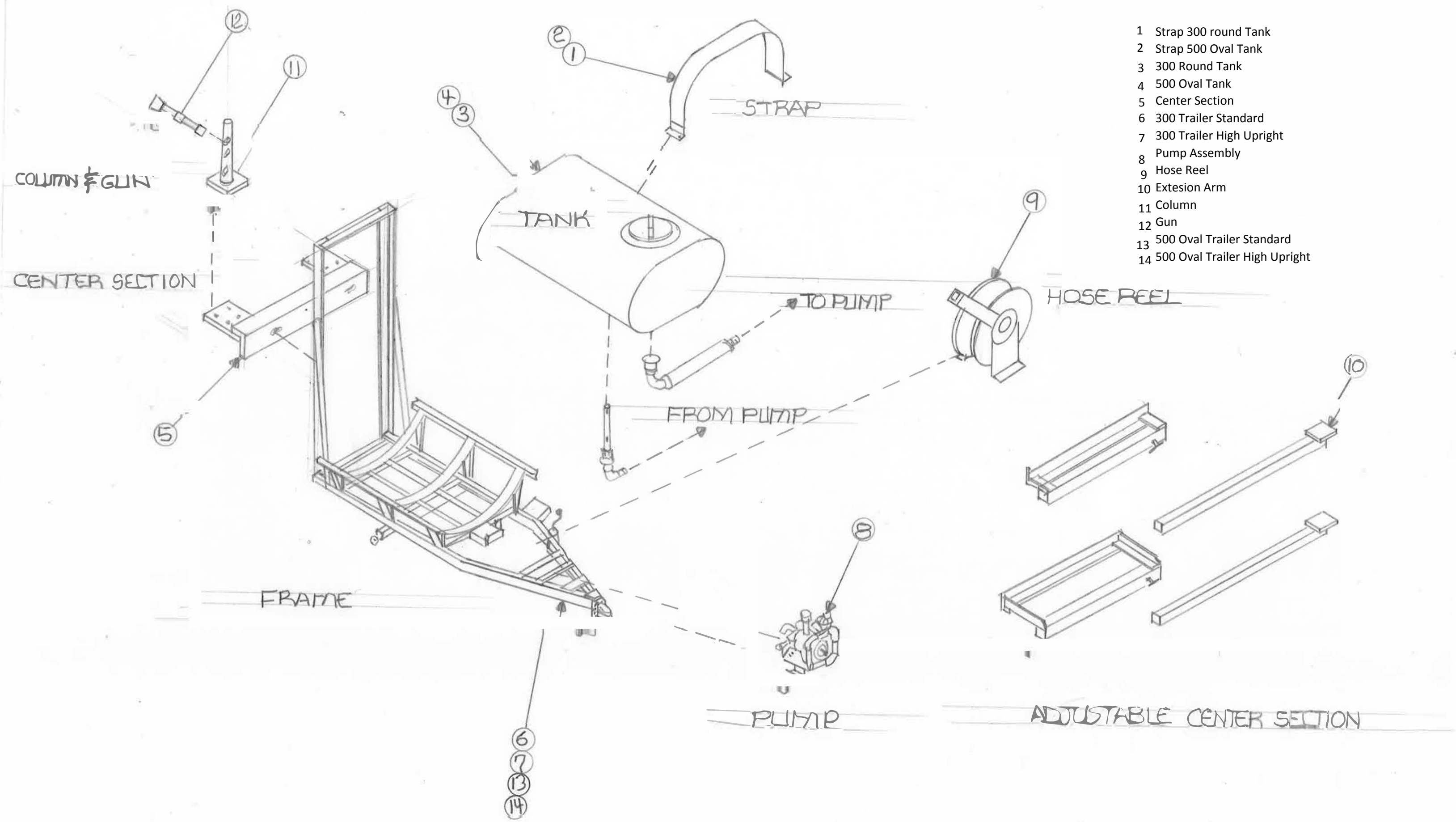


### SPECIFICATIONS

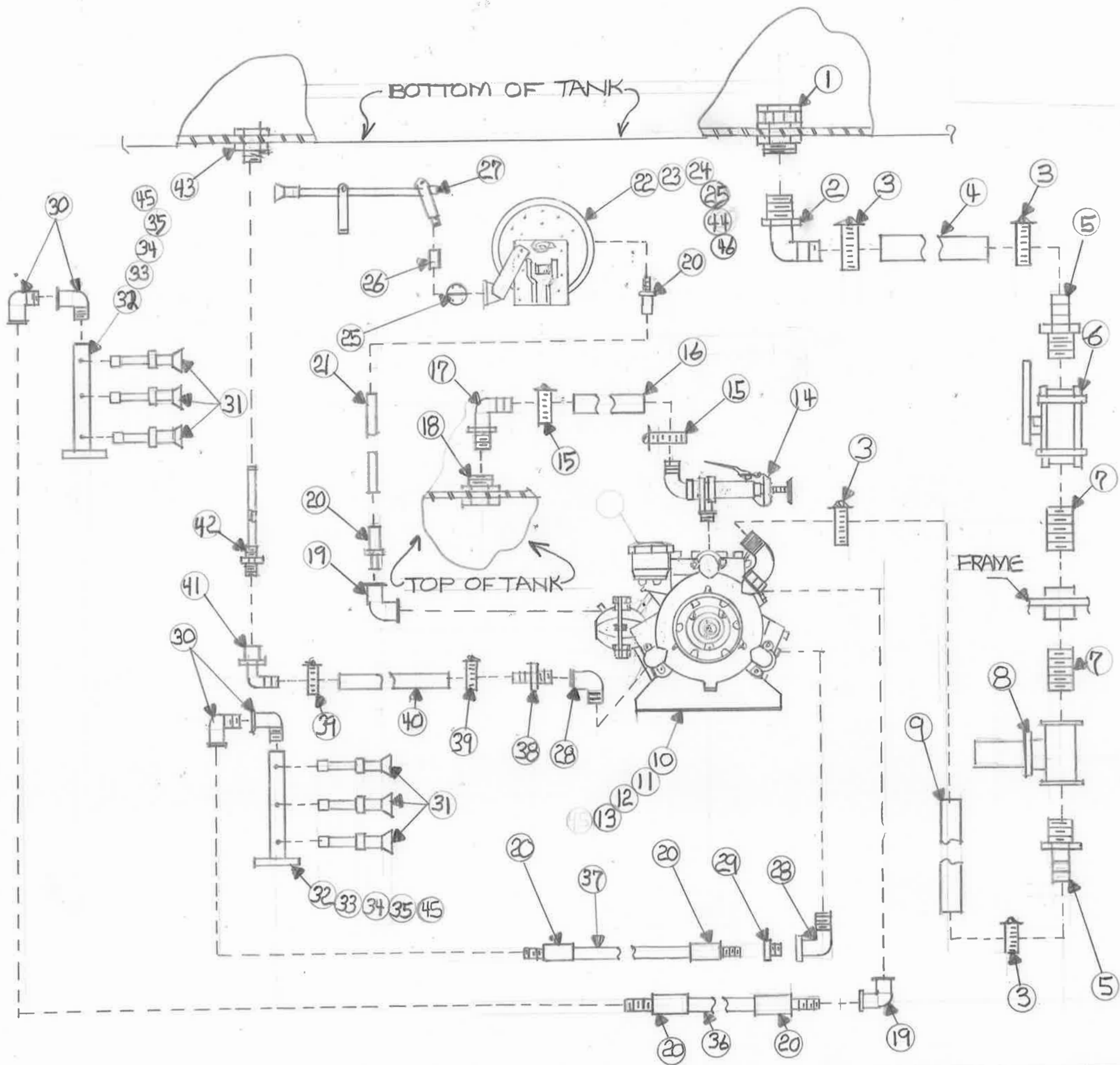
Maximum Flow .....	36 GPM
Maximum Pressure.....	700 PSI
Maximum Pump Speed.....	540 RPM
Maximum Temperature.....	140° F
Inlet Port Hose Barb.....	1-1/2"
Outlet Ports	
Hose Barb (Ball Valve Controlled).....	1/2" (2)
FNPT .....	3/4" (2)
Bypass Hose Barb.....	1"
Dimensions .....	L-19.5" x W-15" x H-22"
Weight .....	100 lbs.
Diaphragm Material	
Standard.....	DESMOPAN
Optional .....	BUNA-N

NOTE - Protect pumps from freezing. If freezing conditions exist, flush pump and system with a 50/50 mixture of antifreeze and water.

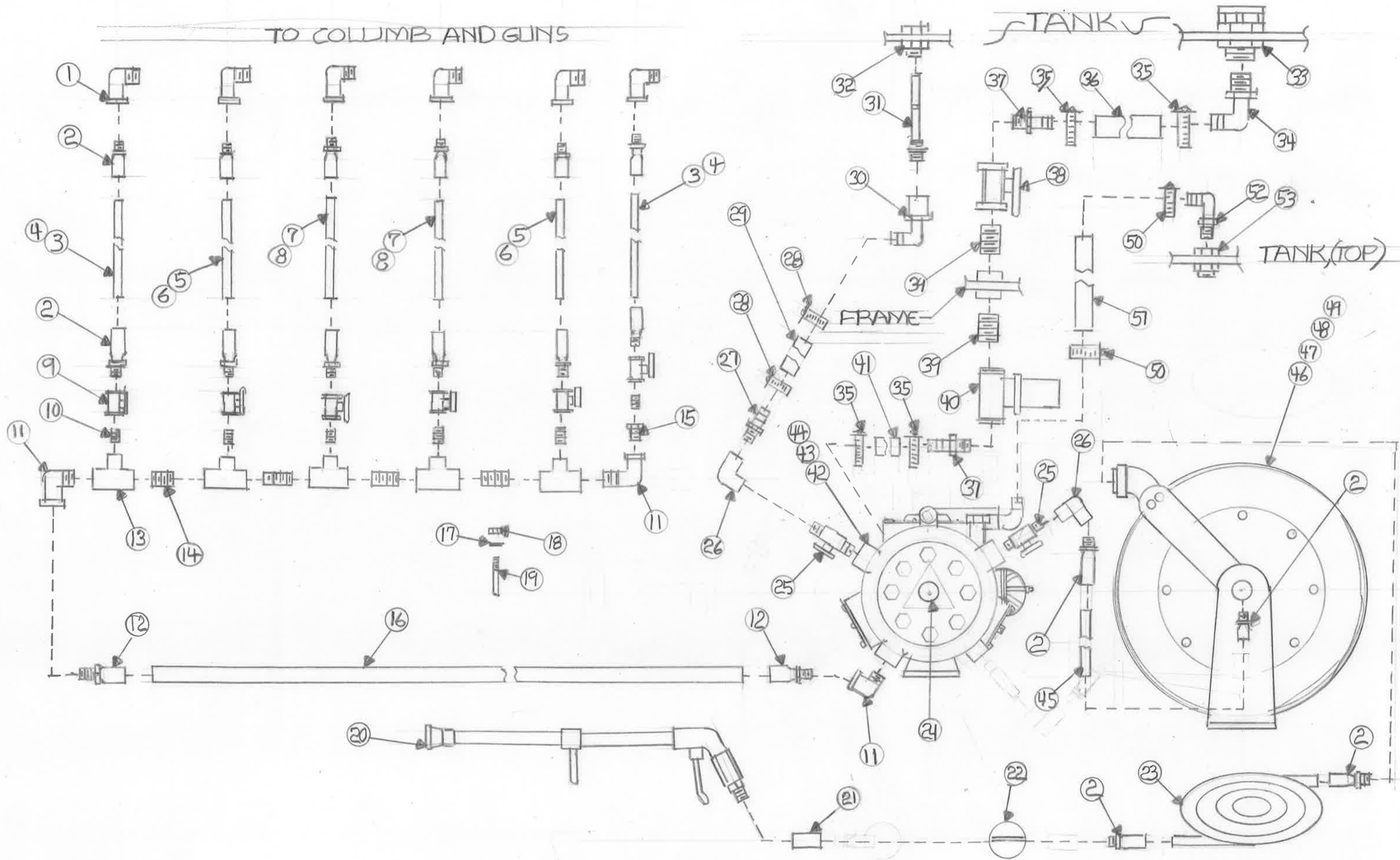




- 1 Strap 300 round Tank
- 2 Strap 500 Oval Tank
- 3 300 Round Tank
- 4 500 Oval Tank
- 5 Center Section
- 6 300 Trailer Standard
- 7 300 Trailer High Upright
- 8 Pump Assembly
- 9 Hose Reel
- 10 Extesion Arm
- 11 Column
- 12 Gun
- 13 500 Oval Trailer Standard
- 14 500 Oval Trailer High Upright



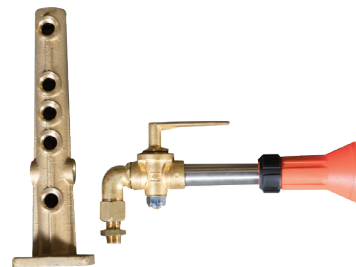
TO COLUMB AND GUNS



<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>PART NO.</b>
1	Street Elbow 1/2" Galvanized	GSE1290
2	Hydraulic Fitting 1/2" MPT Swivel	HU0808MC
3	Hose 1/2" 800 PSI Green (6 Ft.	12-Y-800
4	Hose 3/4" Green PVC Suction( 4 Ft.	34-RF
5	Hose 1/2" 800 PSI Green (3 Ft.	12-Y-800
6	Hose 3/4" Green PVC Suction( 2 Ft.	34-RF
7	Hose 1/2" 800 PSI Green (4 Ft.	12-Y-800
8	Hose 3/4" Green PVC Suction (3 Ft.	34-RF
9	Ball Valve 1/2" FPT Brass	12BBV
10	Nipple 1/2" x Close Galvanized	GN121
11	Street Elbow 3/4" Galvanized	GSE3490
12	Hydraulic Fitting 3/4" MPT Swivel	HU1212MC
13	Tee 3/4" x 3/4" x 1/2" FPT Galvanized	GSE3490
14	Nipple 3/4" x Close Galvanized	GN341.5
15	Reducer Bushing 3/4" MPT x 1/2" FPT Galvanized	GB3412
16	Hose 3/4" 800 PSI Green (12Ft,	34-Y-800
17	Flat Washer 5/16"	FW516
18	Nut 5/16"	HN516C
19	U-Bolt 5/16" x 2" x 1 3/8" Square	SQU516200
20	Spray Gun High Pressure Long Range	13.901.151
21	Coupling 1/2" FPT Galvanized	GCP1200
22	Hose Bumper 3/4"	2-HR1005
23	Hose 1/2" 800 PSI Green(25 Ft.	12-Y800
24	Shaft Protector	1219.15
25	Ball Valve 1/2" MPT	Call
26	Elbow 1/2" FPT 90 Galvanized	GEL1290
27	Hose Shank 1/2" MPT x Barb Nylon	A12
28	Hose Clamp 1/2"	8H
29	Ag. Hose 1/2" Red ( 12Ft.	3420-0410
30	Elbow 3/4" FPT x 1/2" barb 90 Nylon	EL3412F
31	Jet Agitator 3/4"	3371-0019
32	Tank Fitting 3/4"	60401
33	Tank Fitting 1 1/4" Anti-Vortex	47065
34	Elbow 1 1/4" MPT x 1 1/2" Barb 90 Nylon	EL114112
35	Hose clamp 1 1/2"	28H
36	Hose Wire Coil 1 1/2"(4 Ft.	12003501
37	Hose shank 1 1/2" MPT x Barb Nylon	A112
38	Ball Valve 1 1/2" FPT Poly	V-150
39	Nipple 1 1/2" x Close	GN1121.75
40	Strainer 1 1/2" 20 Mesh Polly	3350-0112
41	Hose Wire Coil 1 1/2"(2 Ft.	12003501
42	Pump	OMEGA - 140
43	Bolt 7/16" x 1 1/4"	CS716114C
44	Nut 7/16"	HN716C
45	Hose 1/2" 800 PSI Green (2 Ft.	12-Y-800
46	Hose Reel	82000-OMP

47	Bolt 3/8" x 1"	CS38100C
48	Nut 3/8"	HN38C
49	Lock Washer 3/8"	LW38
50	Hose Clamp 1"	20H
51	Ag. Hose 1" Red ( 12Ft.	3204-0425
52	Elbow 1 " MPT x " Barb 90 Nylon	EL100
53	Tank Fitting 1"	60427

# COLUMN SPRAYERS



Model	GPM	l/min	PSI	bar	Description	List Price
1238.G4	50.0	189.5	850	58	Column Mounted Spray Gun. Adjustable Pattern. 360° Rotation	\$ 154.50
1238.G3					Brass Spray Column. Holds up to Five (5) Column Mounted Spray Guns. (Sold Separately)	\$ 151.93