

MODEL NO.	41080-90001	& UP
MODEL NO.	41021-90001	& UP
MODEL NO.	41220-90001	& UP
MODEL NO.	41223-90001	& UP
MODEL NO.	41222-90001	& UP

SET-UP AND PARTS LIST

MANUAL SPRAY SYSTEM FOR THE WORKMAN 3000 VEHICLE

Refer to the illustrated Parts List for details of parts used in assembling the Pro-Control ™ System.

NOTE: "Right", "Left", "Front" and "Rear" are referenced while seated in the operator's position.

Install the TORO APU Electric Clutch Kit as per the instructions provided with that kit.

PUMP INSTALLATION:

1. Slide the Pulley Spacer on the Pump Shaft. Install the square key into the centrifugal pump shaft key slot. Place the pump pulley on the pump shaft and secure to the shaft using 5/16" x 3/4" hex hd. cap screw, 5/16 l.D. 10 GA. flat washer, and lockwasher (FIG. 1).

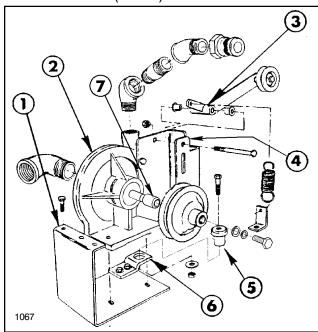


FIG. 1

- 1. Pump Mounting Brkt.
- 2. Centrifugal Pump
- 3. Idler Pivot
- 4. Idler Pivot Brkt.
- 5. Rubber Mount
- 6. Tab Mount
- 7. Pulley Spacer
- 2. Attach the idler pivot bracket to the pump by removing the two pump housing bolts and replacing with (2) 3/8" x 1" hex hd. cap screws. (See FIG. 1)
- 3. Install one flange bushing into each end of the idler pivot assembly mounting hole and attach to the idler bracket using the 3/8" x 3" hex hd cap screw and locknut.

4. Mount the small inside idler pulley on the long arm of the idler pivot using the 3/8" x 2 3/4" hex hd cap screw, 7/8" spacer, and locknut. Shim as required between Idler Pivot Ass'y and Inside Idler Pulley with the (3) 3/8" flat washer to align with Pump Pulley. Attach the tension spring to the short arm of the idler pivot assembly (FIG. 1).

NOTE: In the following instructions, sealer refers to Teflon Tape when used for pipe fittings.

- **5.** Apply sealer and install the 90 degree x 1 1/4" street elbow into the suction port of the pump. Apply sealer and install the 1" x 3" nipple, (2) 45 degree x 1" elbows, and quick adapter into the discharge port of the pump (FIG. 1).
- **6.** Install the rubber mount into the tab mount and loose fit the tab mount to the pump mounting bracket using the (2) 3/8" x 1" hex hd cap screws, flat washers, and locknuts (FIG. 1).

NOTE: For the installation of pump mount bracket it is necessary to first remove the rear mounting bolt on the hydraulic valve. If equipped with the auxiliary hydraulic package, it is necessary to remove the last two mounting bolts of this valve. This will allow for usage of the bolt holes to properly install pump mount bracket. Reuse the fasteners earlier removed.

- 7. Attach the pump mount bracket assembly to the left side of the vehicle frame using the (3) 5/16" x 1" hex hd cap screws, lockwashers, and hex nuts (FIG. 3). Next, attach the tab mount to the crossmember using the 3/8" x 1 1/2" hex hd cap screw, 3/8" I.D. 10 GA. flat washer, and locknut. See FIG. 1. Tighten all fasteners securely.
- **8.** At the hydraulic control valve, loosen and disconnect the fittings for the right hand dump cylinder hoses. Reroute these hoses to the underside of the pump suction hose. Reconnect and tighten fittings, then secure with tie straps. Secure all other hoses and cables with tie straps to ensure they do not rub against pump pulleys and belts (FIG. 2).

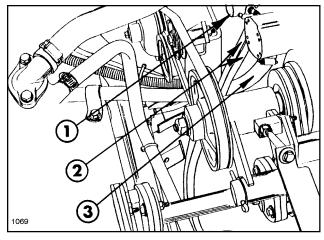


FIG. 2

- 1. Hydraulic Control Valve
- 3. Pump Suction Hose
- 2. R.H. Dump Cylinder Hoses
- **9.** Mount the pump and the spring tab to the pump mount bracket using the (2) 3/8" x 1 1/2" hex hd cap screws, flat washers, and locknuts. Attach the spring to the spring tab located at the base of the pump (FIG 1).

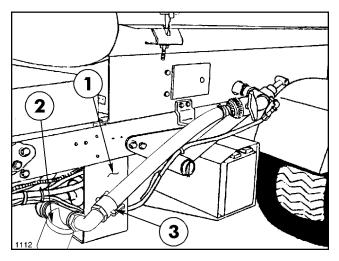


FIG. 3

- 1. Pump Mounting Brkt.
- ng Brkt. 3. Quick Adapter
- 2. Suction Strainer
- **10.** Apply thread sealer and install the 1 1/4" close nipple, suction strainer, 90 degree st. elbow, reducing nipple, and quick adapter into the suction side of the pump (FIG. 3).
- 11. Install the pump drive belt on the pulleys as shown in FIG. 4. After installation of the belt, loosely mount the backside idler pulley in the long slot on the idler pivot bracket using 3/8" x 2" carriage bolt, 3/4" spacer, hex nut, lockwasher and (2) flatwashers. With the belt on the topside of the idler pulley, slide the pulley up until all the slack is removed from the belt, then tighten the nut on the carriage bolt. To apply tension to the belt, place the inside idler pulley under the belt. See FIG. 4.

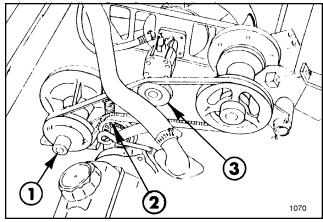


FIG. 4

- 1. Pump Pulley
- 2. Backside Idler Pulley
- 3. Inside Idler Pulley

NOTE: On models equipped with the diesel engine, the enclosed hose protector and nylon tie must be installed on the lower radiator hose next to the street elbow in the suction port of the pump. On models equipped with the liquid cooled gas engine, install the hose protector and nylon tie on the upper radiator hose above the pump belt. This is to prevent the hose from wearing through prematurely.

CONTROL CONSOLE & HARNESS INST:

- **1.** Unplug the wire harness connectors from both headlights.
- **2.** Remove (15) screws and washers securing front hood to vehicle frame and remove hood.
- **3.** Temporarily mount the console mounting bracket to the upper dash support using two of the earlier removed screws and washers (FIG. 5).

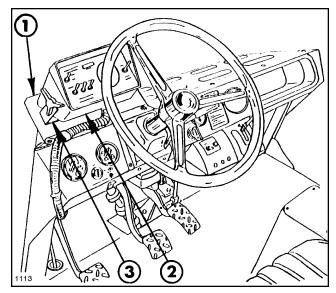


FIG. 5

- 1. Mounting Bracket
- 2. Control Console
- 3. "U" Console Brkt.

- **4.** Using (2) 1/4" x 5/8" hex washer head screws, flat washers and nuts, secure the "U" shaped console bracket to the console bracket to the console mounting bracket. Mount the console to the "U" shaped bracket using the (2) mounting knobs (FIG. 5).
- **5.** Route the control cable under the dash and through the hole in the floorboard. See Fig. 6. Loosen the bolts on the channel under the floorboard and feed the cable through the channel.
- **6.** Route the control cable along the left side of the vehicle back towards the engine compartment and secure with nylon ties.

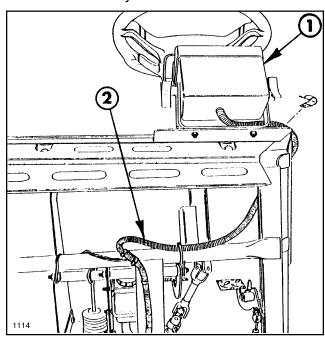


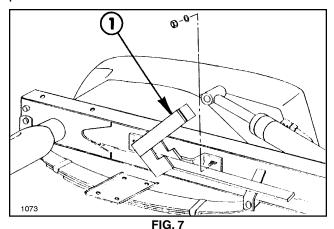
FIG. 6

- 1. Control Console
- 2. Control Cable
- 7. Locate and plug the 6' extension cable into the main console cable and connect the 1/4" gauge tube with the 1/4" union fitting. Route the extension cable to the rear of the vehicle and secure with nylon ties.
- **8.** Re-tighten the bolts on the channel under the floorboard.
- Turn the "POWER ON/OFF SWITCH TO "OFF".
- **10.** Route the red and white battery wires of the console control cable to the auxiliary fuse block. Connect the red wire to a red wire on the fuse block and ground the white wire to the ground terminal bolt.
- **11.** Insert the 20 amp fuse into the fuse block and affix decal marking fuse for the spray system.

- NOTE: It may be necessary to leave the hood off to mount other accessories. If so, do not complete steps 12-14 until all other accessories are installed.
- **12.** Remove the (2) screws that hold the console and console mounting bracket to the vehicle.
- **13.** Reinstall the hood and remount the console and console mounting bracket using the 15 screws and washers earlier removed and install the "R" clamp on the console cable and secure.
- **14.** Reconnect the wire harness connectors to both headlights.

TANK INSTALLATION:

- 1. Loosen and remove the (2) 3/8" nuts and attaching bolts that hold the left rear fender to the vehicle frame. Install a 10 GA. flat washer on each bolt and install the bolt through the fender and vehicle frame and mount the tank support bracket with these bolts. Reinstall the nuts and tighten securely. If not equipped with fenders, use the hex hd cap screws and nuts provided. See FIG. 7.
- 2. Cut the shipping straps and remove the Spray Tank and Skid Assembly from the shipping pallet.



Tank Support Brkt.

- 3. Install the two trim pieces on the middle and right cutouts at the front of the tank skid.
- 4. Place the tank and saddle assembly on the vehicle frame. Secure it to the vehicle frame by sliding the (2) 3/4" dia. clevis pins through the rear mounting lugs and the vehicle frame. Secure by installing the (4) lynch pins into the clevis pins. See FIG. 11.
- **5.** Install the Anti-Siphon device as shown in the Anti-Siphon Kit instructions provided.
- **6.** Mount right Hold-In Brace assembly to the (2) 5/16" carriage bolts in the front Tank Band using (2) 5/16" flat washers and hex nuts. Tighten securely. See FIG. 8.

- 7. Attach right Boom Hold-In assembly to Hold-In Brace assembly using (2) 1/4" U-bolts and (4) 1/4" lock nuts. Attach Rubber Hold-Down to Hold-In Brace assembly. Repeat steps 6 and 7 for left side.
- **8.** Mount Wash Tank Bracket (open end forward) to right-hand Hold-In Brace assembly using (2) 5/16" x 1" hex hd. cap screws, flat washers, and hex nuts. Place Clean Water Wash Tank into Wash Tank Bracket and secure with Rubber Hold-Down, as shown in FIG. 8.

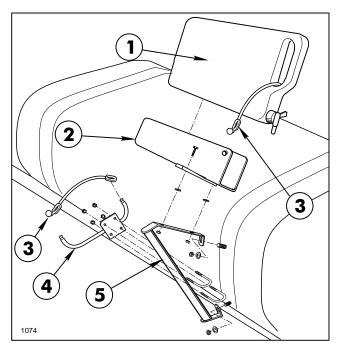
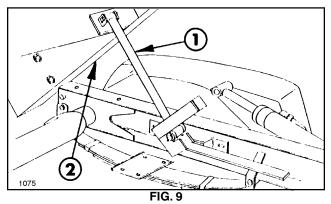


FIG. 8

- 1. Clean Water Wash Tank
- 2. Wash Tank Bracket
- 3. Rubber Hold-Down
- 4. Boom Hold-In Ass'y
- 5. Hold-In Brace Ass'y
- **9.** Raise and support the front of the tank saddle assembly approximately 30 40 degrees to gain access to the engine compartment.



- 1. Strut Support Rod
- 2. Tank Saddle Ass'y
- **10.** Assemble the (2) 3/8" long spacers, clevis pin, and cotter pin to one end of the strut support rod Insert Strut Support Rod through the support bracket located on left side of the vehicle (FIG. 9).

- **11.** Attach the strut support rod assembly to the inside of the skid at the rear bulkhead using the clevis and cotter pin (FIG. 9).
- **12.** Locate and remove the (2) 1/2" bolts on each side of the vehicle frame and install the attachment mounting bracket using the bolts earlier removed. Re-tighten the nuts and bolts securely (FIG. 10).

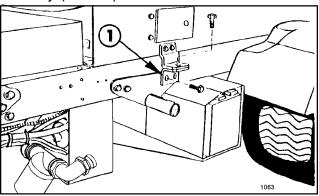


FIG. 10

- 1. Attachment Mounting Brkt.
- **13.** Secure all wiring along the vehicle frame and under the dash panel with the plastic cable ties furnished.
- **14.** Release the strut support rod and lower the tank and saddle assembly.
- **15.** Apply sealer and install the 1"90 degree hose barb in the rear tank tee (FIG. 16).

NOTE: If installing the "Enclosed Boom" option inplace of the standard boom, disregard "BOOM INSTALLATION" and "BOOM EXTENSION & NOZZLES INST."

BOOM INSTALLATION:

1. Attach the two boom mount upright angles onto the rear of the tank saddle extensions using (4) 1/2" x 1 1/4" hex hd cap screws and locknuts (FIG. 11)

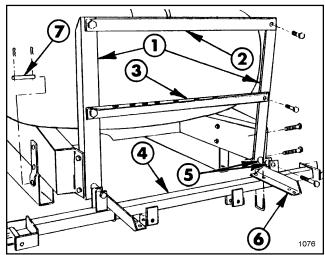


FIG. 11

- 1. Upright Angles
- 2. Upper Cross Support
- 3. Lower Cross Support
- 4. Boom Main Frame
- 5. Spacer Tubes
- 6. Center Boom Angle
- 7. 3/4" Clevis Pin

NOTE: Steps 2-4 apply to the assembly of the standard boom only. If the optional "Boom Pivot Kit" will be installed, see the instructions furnished with that kit. The lower cross support to be used with that kit is different than the support to be used on the standard boom.

- 2. Position the lower cross support angle and attach it to the boom mount upright arms with (2) 1/2" x 1 1/4" hex hd cap screws and locknuts (FIG. 11).
- 3. Position the upper cross support angle and attach it to the boom mount upright angles with (2) 1/2" x 1 1/4" hex hd cap screws and locknuts. (See FIG. 11)
- **4.** Position the spacer tubes between the boom mount upright angles and the lug on the main frame tube. Use (2) 1/2" x 4" hex hd cap screws and locknuts to secure the main frame to the uprights (FIG 12).
- **5.** Position the two center boom angles on the main frame tube and secure them to the frame tube with (2) square U-bolts, (4) flat washers, and (4) hex nuts (FIG. 11).
- **6.** Center and attach the center boom pipe to center boom angles with two clamps, 3/8" x 1" hex hd cap screws, washers and lock nuts. See FIG. 12.

BOOM EXTENSION & NOZZLES INST:

1. Loosely attach the double barb turret assembly in the approximate center of the center boom pipe. For most uniform spray coverage, position all turret assemblies as shown in FIG 12.

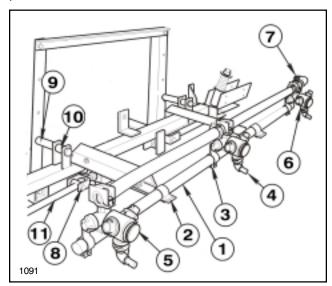


FIG. 12

- 1. Center Boom Pipe
- 2. Boom Clamp
- 3. Nozzle Clamp
- 4. Double Barb Turret
- 5. Single Barb Turret
- 6. Threaded Barb Turret
- 7. 90° Hose Barb
- 8. Adjustable Clevis Ass'y
- 9. 1-1/4" Spacer Tube
- 10.1" Spacer Tube
- 11.Strut Assembly

- 2. Loosely attach a single barb turret assembly to LH end of the center boom pipe. Loosely attach threaded turret assembly to RH end of the center boom pipe. Place two hose clamps on the two 3/4" x 19" jumper hoses and connect the two "end" turret assemblies to the double barb turret assembly. Turret assemblies should be level and spaced on 20" centers. Install 90° 3/4" hose barb on RH turret assembly. Tighten all fasteners securely (FIG. 12).
- 3. Attach the strut assemblies to the adjustable clevis assemblies found on each side of the main frame tube with (2) 1/2" x 2" clevis pins and (2) 1/8" x 1" cotter pins. See FIG. 12.

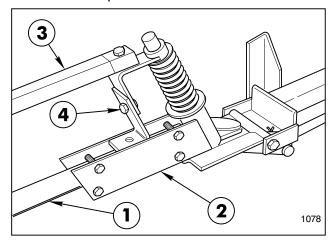


FIG. 13

- 1. Extension Boom Pipe
- 2. Pivot Ass'y
- 3. Boom Support Ass'y
- 4. Height Adjustment
- 4. Insert the plugged end of an extension boom pipe into the pivot assembly and secure with (4) 1/4" x 1 1/4" hex hd cap screws and lock nuts. Repeat on the opposite side to assemble the other extension boom (FIG. 13).

IMPORTANT! Do NOT over tighten nuts in steps 4 & 6. The clamping action could crush the boom pipe.

- **5.** Attach the boom support assembly to the pivot assembly, using a 5/16" x 1 1/2" screw and locknut. See FIG. 13 & 14.
- **6.** Secure the two plates of the boom support assembly to the extension boom pipe, using (2) 1/4" U-bolts, (4) locknuts, and (4) flat washers (FIG. 14).
- **7.** Assemble the boom support assembly to the other extension boom pipe.
- **8.** At the adjustable clevis assemblies (FIG. 12), adjust the booms to the level position by adjusting the jam nuts to the desired position, then tighten the end nuts against the boom frame support member.

9. Attach three double barb and one single barb turret assemblies on each extension boom pipe as shown in FIG. 14. Turret assemblies are to be level & spaced on 20" centers. Connect the turret assemblies with the 3/4" x 19" jumper hoses. Secure with hose clamps. NOTE: Two jumper hoses provided with this kit are 21" long. They should be cut to 19" long for this set-up.

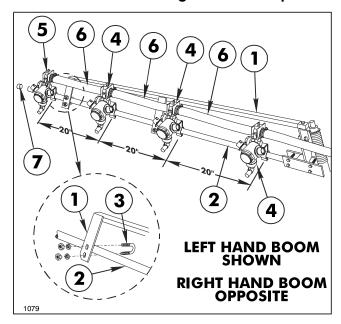


FIG. 14

- 1. Boom Support Assembly 5. Single Barb Turret
- 2. Extension Boom Pipe
- 6. Jumper Hose 3/4 x 19"
- 3. U-bolt
- 7. Boom Cap
- 4. Double Barb Turret

INSTALLING SPRAY VALVES:

- **1.** Install three (3) 90° 3/4" Hose Barbs into the front outlet (wiring side) ports of Solenoid Valves. See FIG. 15.
- 2. Install Close Nipple to the Control Valve side of the Solenoid Valve Assembly. Connect Solenoid Assembly to Control Valve by screwing the two together. See FIG. 16.
- 3. Connect the plug on the 6' extension cable to the control valve, then make connections to the electric solenoid valves (black wire on the left solenoid, brown on the middle solenoid, blue on the right solenoid, and white jumper on all three solenoids. See FIG. 15.
- **4.** Slide head of M6 x 16 mm hex hd. screw to the top of the mounting groove in each Solenoid Valve. Assemble Solenoid Valve Assembly to the Solenoid Mounting Bracket using three (3) M6 x 16 mm screws just installed. Secure Solenoids with three (3) M6 hex nuts and lockwashers. See FIG. 16.

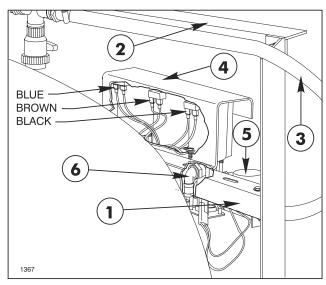


FIG. 15

- 1. Bottom Cross Support
- 4. Solenoid Mtg. Bracket
- 2. Top Cross Support
- 5. Control Valve
- 3. Supply Hose 1" x 42"
- 6. 90° 3/4" Hose Barb (3)
- 5. Install Solenoid Valve and Bracket Assembly to the Bottom Cross Support as shown in FIG. 15. Secure with two (2) flange cap screws and Hex Flange Nuts. NOTE: If the Hydroject 4000 kit (Model 09850) has been installed or will be installed, it is necessary to remove and discard top Cross Support Angle and put the Bottom Cross Support Angle in its place. A hole will have to be drilled to mount the Tee Assembly Bracket on the relocated Bottom Cross Support.

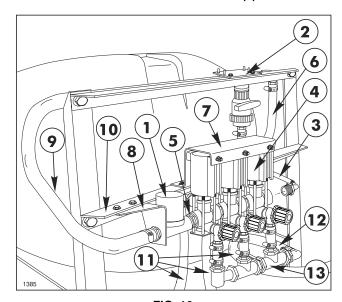


FIG. 16

- 1. Control Valve
- 2. Tee Assembly Bracket
- 3. Pressure Gauge Tube
- 4. Solenoid Valve Assy.
- 5. 3/4" Close Nipple
- 6. Supply Hose 1" x 100"
- 7. Solenoid Mtg. Bracket
- 8. Control Valve Bracket
- 9. Supply Hose 1" x 42"
- 10. Bottom Cross Support
- 11. Boom Feeder Hose
- 12. Bypass Hose 1" x 13"
- 13. Bypass Manifold Assy.

- **6.** Install Control Valve Bracket to Bottom Cross Support. See FIG. 16. Secure with two (2) flange cap screws and Hex Flange Nuts. (Do not tighten).
- 7. Place Straight Hose Barb through circular opening in Control Valve Bracket and screw into the inlet port of the Control Valve. Tighten Control Valve Bracket fasteners securely.
- **8.** Install Reducer Bushing/Gauge Tube Fitting to end port of Solenoid Valve Assembly. Connect Pressure Gauge Tube to Gauge Tube Fitting.
- **9.** Install 90° hose barb to Right Hand end of Bypass Manifold Assembly. See FIG 16.
- **10.** Connect the boom feeder hoses to the three hose barbs in the electric solenoids and secure with hose clamps. See FIG. 16.
- **11.** Place a hose clamp on the center boom feeder hose and attach it to the 90° hose barb at the RH end of the center boom pipe.
- **12.** Place a hose clamp on the right and left boom feeder hoses and attach them to the double barb turrets on the right and left extension boom pipes.
- **13.** Apply sealer and install the 1" x 1" hose barb into the L.H. end of the tee assembly and a 1" x 3/4" hose barb into the ball valve at the tee assembly. See FIG. 16.
- **14.** Mount the tee assembly and bracket to the upper cross support with (2) 5/16" x 1" hex hd cap screws, flat washers, lockwashers, and nuts (FIG. 16).
- **15.** Install a 1" quick coupler on the end of the 1" x 100" supply hose and secure with a hose clamp. Connect the supply hose to the discharge port on the pump with the quick coupler. Route the hose along the left side of the vehicle under the tank, connect to the hose barb on the right side of the tee assembly and secure with a hose clamp (FIG. 16). Secure hose at cable mounting bracket and rear cross member with tie straps.
- **16.** Install the protective hose loom on the 100" pressure hose as shown in FIG. 17. Secure the loom to the hose by tightening a tie strap around each end of the loom so that the loom does not shift front to rear.
- 17. Connect the 1" x 42" supply hose to the 1" hose barb on the tee assembly and to the 1" hose barb in the control valve. Secure with hose clamps (FIG. 16).

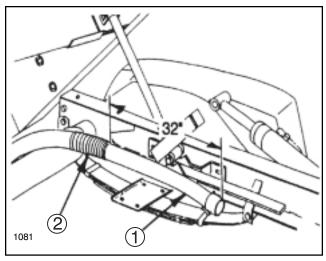


FIG. 17

- 1. 100" Supply Hose
- 2. Protective Loom
- **18.** Connect the 3/4" x 28" agitator hose to the 3/4" hose barb in the ball valve and connect to the hose barb on the rear of the tank. Secure the hose with hose clamps (FIG. 16).
- **19.** Connect the 1" x 13" overflow hose to the 90° hose barb in the end of the Bypass Manifold assembly and connect to the 90 degree hose barb on the left side of the rear tank tee. Secure with hose clamps (FIG.16).
- **20.** Connect the 6' extension cable to main harness.
- **21.** Connect the gauge tube at the 1/4" reducer bushing in the end of the solenoid valve and connect at the main console cable.

RADIATOR COVER & FINAL CHECKS:

- 1. Mount the radiator cover to the vehicle frame using the (4) 3/8" x 1" hex hd cap screws and (4) flat washers.
- 2. Secure the tank skid to the vehicle frame by installing the (2) 1/2" bolts, (4) washers, and (2) lock nuts through the attachment mounting brackets (FIG. 10). Tighten fasteners securely.
- **3.** Attach the suction hose to the suction strainer using the quick couplers.
- **4.** Tighten all fasteners and hose clamps securely before using sprayer.
- **5.** Fill the tank with clean water and check for any leaks.
- **6.** Refer to the Manual Spray Systems Owner's Manual for the proper calibration and operation of the Manual Spray System.



Part No. 75-5190: Located on Radiator Cover top, front & rear (2).



Part No. 92-2663: Located at Fuse Block (1).



Part No. 80-8040: Located on Radiator Cover top, front & rear (2).



Part No. 87-0570: Located on rear Tank Band (2).





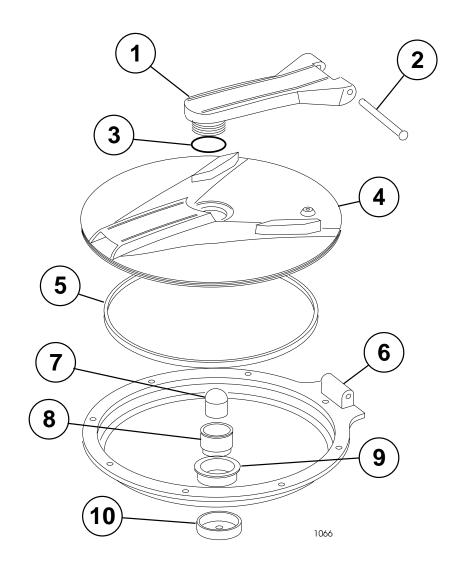
Part No. 92-2669: Located on Tank Skid - left side @ strut (2).



Part No. 93-0688: Located on Tank Lid (1).



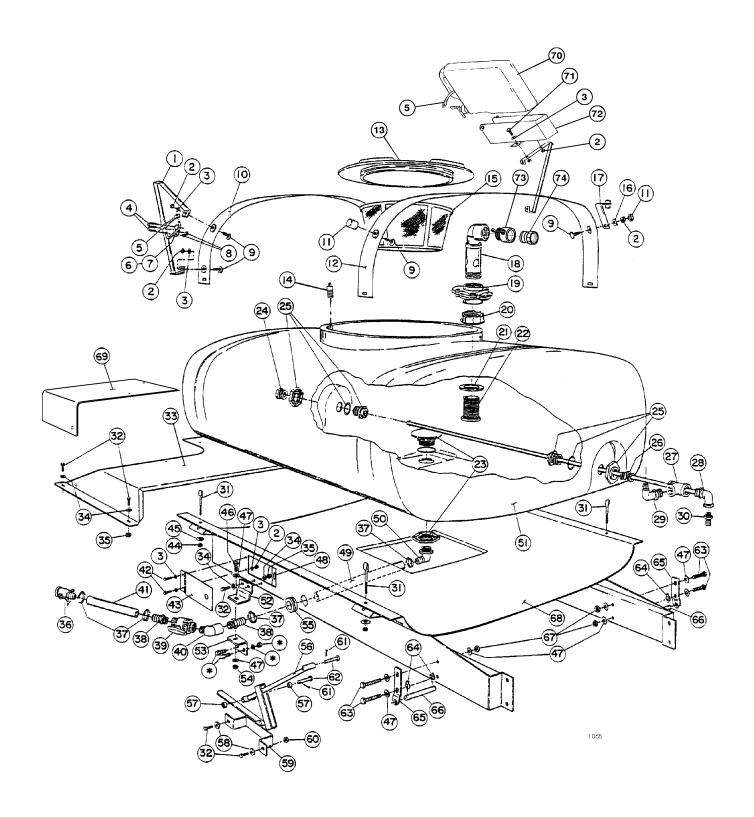
Part No. 62-5550: Located on Tank sides (2).



TANK LID ASM (94-7088)

Ref	Part No.	Description	Qty
1	94-7205	Swivel Arm	1
2	94-7213	Pivot Pin	1
	94-7206	O-Ring, EPDM	1
4	94-7207	Spray Tank Lid	1
5	94-7208	Gasket EPDM	1

Ref	Part No.	Description	Qty
6	94-7211	Tank Lid Ring	1
_	93-0833	Aluminum Pop-Rivet	8
7	94-7209	Breather Plunger	1 1
8	94-7210	Breather Body Breather Nut	1 1
9	94-7212 94-7214		1
10	37-1214	Breather Cap	

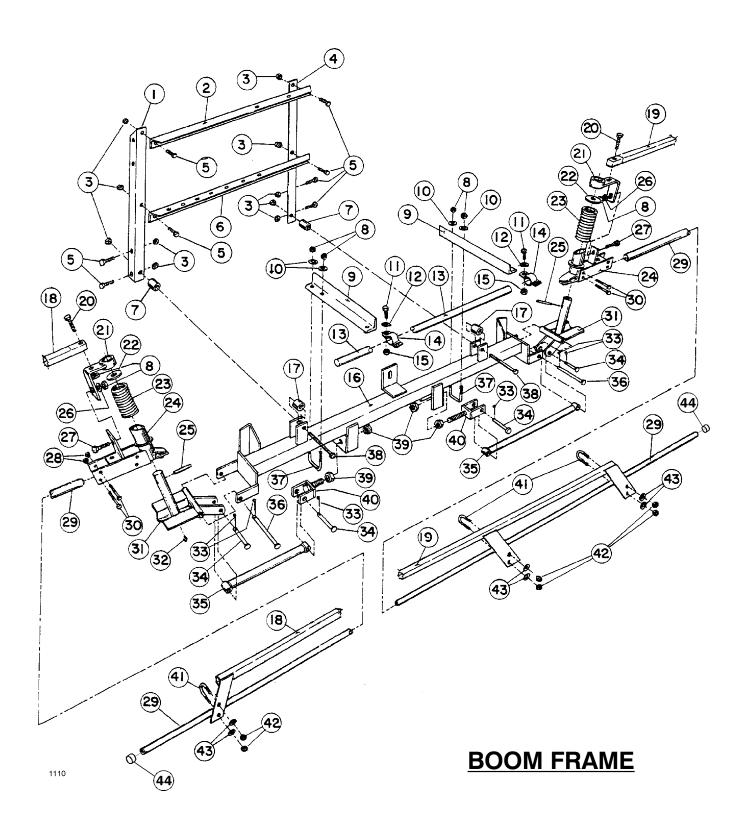


SKID & TANK (200)

* INDICATES FASTENERS INCLUDED WITH THE VEHICLE

SKID & TANK (200)

				,				
Ref	Part No.	Description	Qty		Ref	Part No.	Description	Qty
1	42983	Hold-In Brace ASM	2		36	40480	Female Quick Coupler, 1"	1
2	3217-6	Hex Nut, 5/16	12		37	21146	Hose Clamp	4
3	3256-23	Flat Washer, 5/16 S.A.E.	14		38	92-0012	Hose Barb, 1" NPT x 1"	2
4	92-0010	U-Bolt, 1/4	4		39	40020	Ball Valve, 1" NPT	1
5	42198	Rubber Hold-Down Strap	3		40	41307	90° St. Elbow, 1" NPT	1
6	42259	Boom Hold-In - LH			41	94-8506	Suction Hose, 1" x 21"	1
		(shown)	1		42	322-3	HHCS, 5/16 x 3/4	4
7	42316	Boom Hold-In - RH			43	92-0135	Door ASM	1
		(opposite)	1		44	3217-8	Hex Nut, 7/16	4
8	3217-5	Hex Nut, 1/4	8		45	3256-5	Flat Washer, 7/16	4
9	3230-9	Carriage Bolt, 5/16 x 3/4	6		46	325-6	HHCS, 1/2 x 1 1/2"	2
10	92-3666	Tank Band - Front	1		47	3256-26	Flat Washer, 1/2 S.A.E.	12
11	42452	Protective Cap	2		48	92-3700	Door Magnet	2
12	3253-4	Lock Washer, 5/16	1		49	92-3677	Suction Hose, 1" x 30"	1
13	94-7088	Tank Lid, Hinged			50	42057	90° Elbow, 1 1/4" MPT x 1"	1
		(f/w Tank ASM)	1		51	92-8172	Tank ASM - 200 Gal.	4
14	93-1092	Drain Plug	1		52	92-0159	Front Mounting Bracket	1
15	42323	Filler Basket - 16"			53	92-2667	Attach. Mounting Bracket	1
		(f/w Tank ASM)	1		54	32153-5	Lock Nut, 1/2	2
16	92-3667	Tank Band - Rear	1		55	40764	Grommet	1
17	42277	Pressure Gauge Bracket	1		56	92-3750	Strut ASM	1
18	43069	Stand-Up ASM	1		57	92-0303	Pivot Spacer	2
19	43064	Knife Valve	1		58	356308	Washer, #10 ga.	2
20	43068	Fly Nut, 2" NPT	1		59	92-3690	Strut Support Bracket ASM	1
21	43067	Sealing Washer	1		60	321397	Flange Nut, 3/8	2
22	43066	Bulk Head, 2" NPT	1		61	3272-11	Cotter Pin, 1 1/8 x 1"	2
23	41798	Anti-Vortex Fitting,			62	42195	Clevis Pin, 1/2" x 2	2
		1-1/4 NPT (f/w Tank ASM)	1		63	325-11	HHCS, 1/2 NC x 2 2/4"	4
24	41315	Hex Plug, 1" NPT	1		64	92-1298	Lynch Pin	4
25	41800	Tank Fitting, 1" NPT			65	92-0158	Pivot Lug	1
	41000	(f/w Tank ASM)	1		66	92-1233	Clevis Pin, 3/4 x 4 7/16"	2
26	41304	Close Nipple, 1" NPT	;		67	3217-9	Hex Nut, 1/2 NC	4
27	41305	Tee, 1" NPT	i		68	92-8173	Skid ASM	1 7
28	92-3630	Agitator Tube ASM	;		00	92-3752	Cutout Trim	;
29	41140	90° Elbow, 1" NPT x 1"	;			92-3753	Cutout Trim	;
30	41257	Hose Barb, 3/4 NPT x 3/4	;		69	93-6427	Radiator Cover - Panel	;
31	92-3668	"J" Bolt	4		03	32144-10	Hex WS Screw, 1/4 x 5/8	3
32	323-6	HHCS, 3/8 x 1"	10		70	92-3976	Clean Water Wash Tank	1
33	93-6199	Radiator Cover	1		71	322-5	HHCS, 5/16 x 1"	2
	92-3627	Trim - 5 5/8"	;		72	92-3969	Wash Tank Bracket	1
	42657	Trim - 26"	;		73	92-0238	Quick Coupler	;
34	3256-24	Flat Washer, 3/8"	12		74	041316	Quick Oddpler Quick Adapter	
35	32717-7	Hex Nut, 3/8	6		/ 4	041310	Quick Adapter	'
00	32/1/-/	Tiex Nut, 5/6	"					
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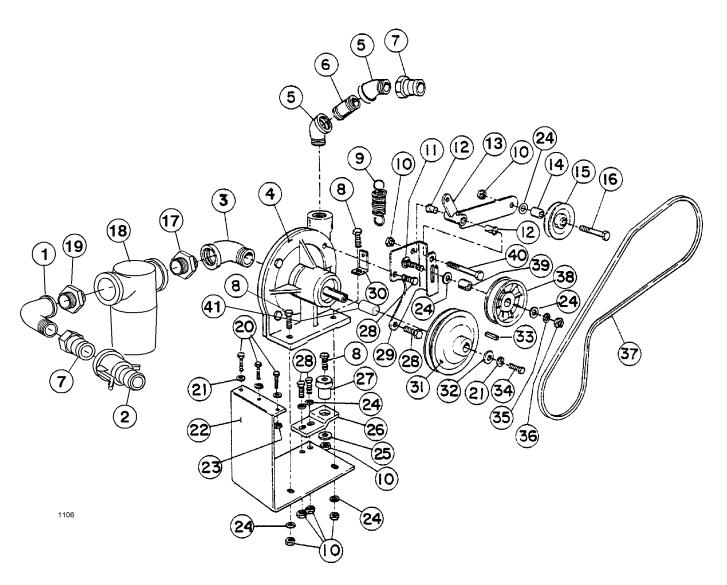


BOOM FRAME

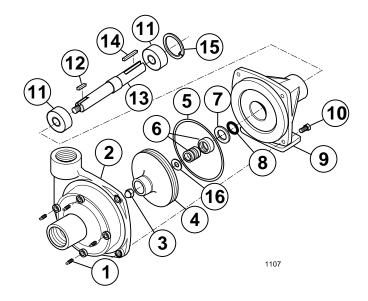
Ref	Part No.		Qty
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 1 * 22	92-3671 92-3672 32153-5 92-3670 325-5 42225 42258 3217-6 42234 3256-3 323-6 3256-4 40493 40494 32153-2 42227 42257 42711 42710 322-7 42707 3256-62	Boom Mtg. Angle - LH Cross Angle - Upper Lock Nut, 1/2 Boom Mtg. Angle - RH HHCS, 1/2 x 1-1/4 Cross Supprot Angle Spacer Tube, 1-1/4" Lg. Hex Nut, 5/16 Center Boom Angle Flat Washer, 5/16 HHCS, 3/8 x 1" Flat Washer, 3/8 Center Boom Pipe Clamp ASM Lock Nut, 3/8 Main Frame Tube-W.A. Spacer Tube, 1" Lg. Boom Support ASM, LH Boom Support ASM, RH HHCS, 5/16 x 1-1/2" Support Bracket ASM Flat Washer, 1" S.A.E.	1 10 18 12 8 2 4 2 2 1 2 1 2 2 2 2

Ref	Part No.	Description	Qty
*23 *24 *25 26 27 28 29 30 *31 33 34 35 36 37 38 39 40 41 42 43 44	42196 42706 32121-78 3256-23 3230-1 32146-17 42282 321-10 42243 361011 3272-11 42195 42240 42194 301950 325-17 3217-11 42237 92-0010 32146-17 3256-2 92-8420	Compression Spring Breakaway Pivot ASM Spring Pin, 1/2 x 2" Flat Washer, 5/16 S.A.E. Carriage Bolt, 5/16 x 3/4 Lock Nut, 1/4 NC Ext. Boom Pipe ASM HHCS, 1/4 x 1-3/4 Hinge ASM Grease Fitting Cotter Pin, 1/8 x 1" Clevis Pin, 1/2 x 2" Strut ASM Clevis Pin, 1/2 x 4-1/2" U-Bolt, 5/16 HHCS, 1/2 x 4" Hex Nut, 5/8 Adjustable Clevis ASM U-Bolt, 1/4 Lock Nut, 1/4 Flat Washer, 1/4 Boom Cap	2 2 2 2 2 8 2 8 2 2 6 4 2 2 2 2 4 2 4 8 8 4

^{*} Denotes parts that are available in an assembled unit. Order #42840 Breakaway ASM.



SPRAYER PUMP ASSEMBLY (3000)



CENTRIFUGAL PUMP (93-6505)

SPRAYER PUMP ASM (3000)

Ref	Part No.	Description	Qty
1	41307	1" 90° Street Elbow	1
2	40480	Quick Coupler x 1"	1
3	93-0887	90° St. Elbow, 1-1/4"	1
4	93-6505	Centrifugal Pump	1
5	5706	45° St. Elbow, 1"	2
6	92-3731	Nipple, 1" x 3'	2
7	41316	Quick Adapter, 1"	2
	41318	Dust Cap	2
8	323-8	HHCS, 3/8 x 1-1/2"	2 2 3 1
9	67-1440	Tension Spring	1
10	32153-2	Lock Nut, 3/8	7
11	3231-7	Carriage Bolt, 3/8 x 2"	1
12	52-2890	Nyliner Bushing	2
13	92-3742	Idler Pivot ASM	1
14	92-3727	Idler Spacer (Inside)	1
15	68-0030	Idler Pulley (Inside)	1
16	323-13	HHCS, 3/8 x 2-3/4"	1
17	92-0050	Close Nipple, 1-1/4"	1
18	42701	Suction Strainer	1
	93-0687	Bowl	1
	94-7065	Strainer Screen 20 mesh	
		std (f/w 42701)	1
	42702	Strainer Screen 40 mesh	
		(optional)	AR

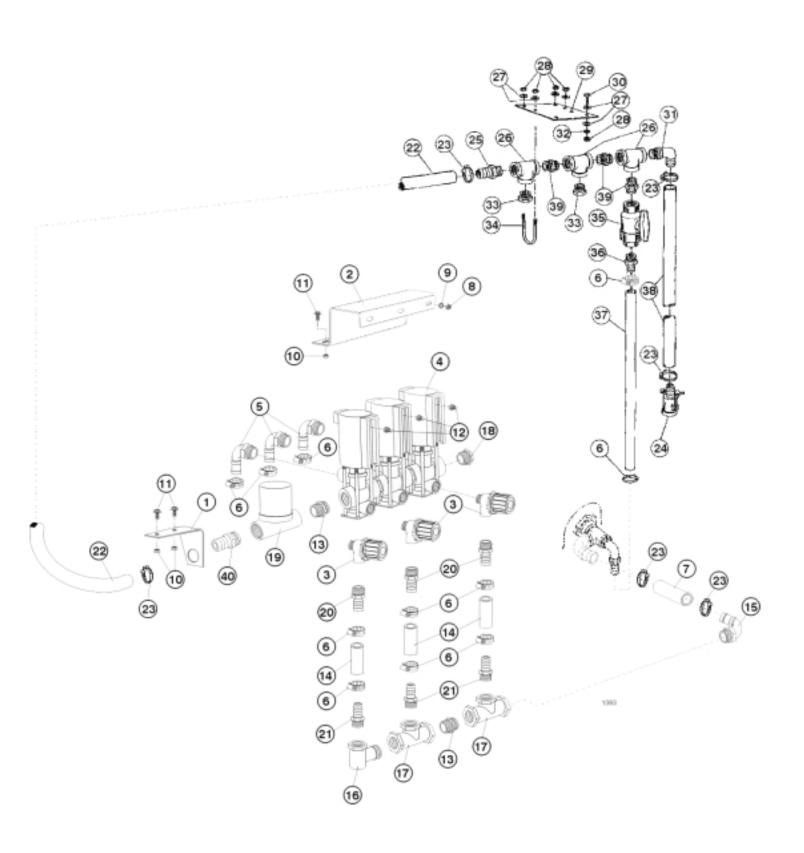
Ref	Part No.	Description	Qty
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	42703 42992 322-5 3253-4 93-3725 3217-6 3256-4 356308 92-3726 63-9750 323-6 92-3740 92-3741 92-2629 356303 92-0049 322-3 3253-11 3217-7 54-1360 41353 92-3746 323-14 94-8502	Strainer Gasket (f/w 42701) Reducing Nipple, 1-1/4 x 1" HHCS, 5/16 x 1" Lock Washer Pump Mounting Bracket Hex Nut, 5/16 Flat Washer, 3/8 Special Washer Tab Mount Rubber Mount HHCS, 3/8 x 1" Pump Bracket Spring Tab Pump Pulley Special Washer Sq. Key, 3/16 x 1-1/4" HHCS, 5/16 x 3/4 Lock Washer, 3/8 Hex Nut, 3/8 NC Drive Belt Idler Pulley (Backside) Idler Spacer (Backside) HHCS, 3/8 NC x 3" Pulley Spacer	AR 1 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CENTRIFUGAL PUMP (93-6505)

Ref	Part No.	Description	Qty
1 2 3 4 *5 *6 7 8	42084 94-8503 42086 94-8504 42089 42088 93-0924 42092	Drain Plug Pump Casting Impeller Nut Impeller O-Ring Mechanical Seal (Viton) Seal Retainer Singer Ring	4 1 1 1 1 1 1

Ref	Part No.	Description	Qty
9 10 11 12 13 14 15 *16	93-0925 323-6 93-0927 93-0928 94-8505 93-0930 42093 93-0931	Mounting Flange Bolt Ball Bearing Key Pump Shaft Key Bearing Retainer Gasket	1 4 2 1 1 1 1

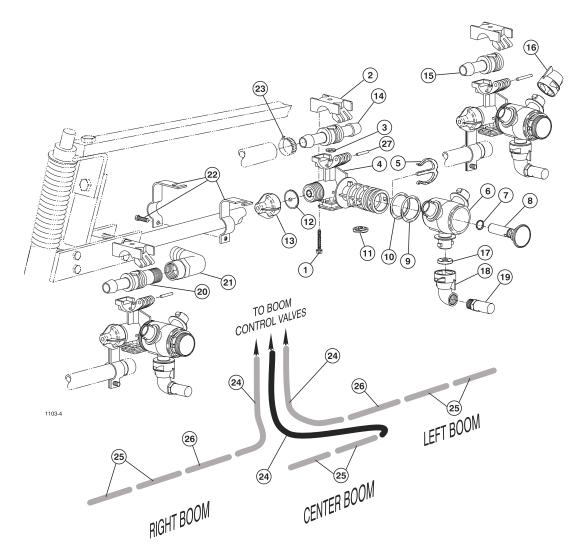
^{*}Denotes parts included in Seal/O-Ring Repair Kit. Order Part No. 94-8520



MANUAL SPRAY SYSTEM (3000)

Ref	Part No.	Description	Qty
1	99-0529	Control Valve Bracket	1
2	99-0528	Solenoid Valve Bracket	1
3	42872	Throttling Valve	3
4	99-0530	Bypass Solenoid Valve ASM	1
	99-0536	Single Solenoid	AR
5	92-8557	Hose Barb, 90° 1/2" x 3/4" H.B.	3
6	92-0045	Hose Clamp	11
7	99-0539	Hose Bypass, 3/4" x 13"	1
8	43-2830	Hex Nut, M6-1	3
9	48-8020	Lock Washer	3
10	32128-20	Hex Flange Nut	4
11	3234-5	HHCS	4
12	48-7620	HHCS, M6 x 16mm	3
13	41294	Close Nipple, 3/4" NPT	2
14	42944	Connector Hose, 3/4" x 2-1/2"	
15	99-0531	90° Hose Barb, 3/4" x 1" H.B.	1
16	42940	St. Elbow, 3/4" NPT	1
17	42941	Tee, 3/4" NPT	2
18	41310	Reduer Bushing, 3/4" x 1/4"	1
19	42936	Control Valve	1
20	41313	Hose Barb, 1/2 x 3/4" H.B.	3

Ref	Part No.	Description	Qty
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40	41257 92-3696 21146 40480 92-0012 41305 3256-23 3217-6 92-3675 322-5 41140 3253-4 41315 92-3723 40020 92-0236 92-3721 92-3707 41304 41730	Hose Barb, 3/4" x 3/4" H. B. Supply Hose, 1" x 42" Hose Clamp Quick Adapter Hose Barb, 1" x 1" H.B. Tee, 1" NPT Flat Washer Hex Nut Manifold Mount Plate HHCS 90° Elbow, 1" x 1" H.B. Lock Washer Hex Plug, 1" MPT U-Bolt, 5/16 Ball Valve, 1" NPT Hose Barb, 1" x 3/4" H.B. Agitator Hose, 3/4" x 28" Supply Hose 1" x 100" Close Nipple, 1" NPT Hose Barb, 3/4" x 1" H.B.	3 1 6 1 1 3 8 6 1 7 1 2 2 2 1 1 1 1 3 1

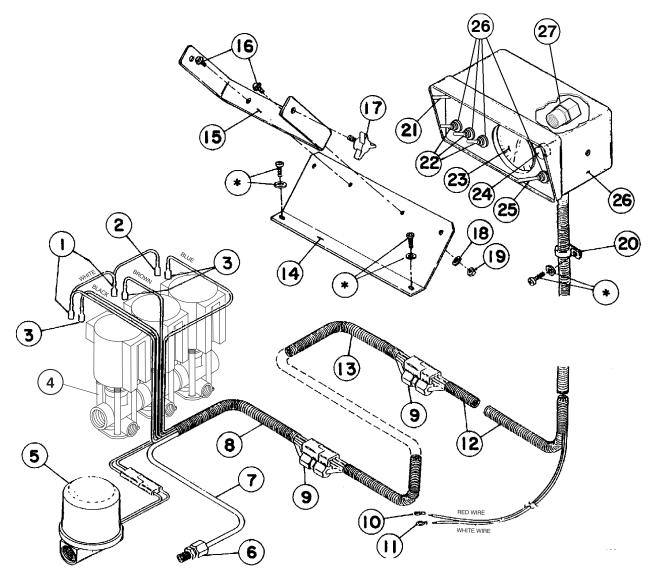


TURRET BODIES & BOOM HOSES

Ref	Part No.	Description	Qty
*	95-9183	Turret Body - Doubvle Barb (Incl. Ref. #'s 1-14)	7
*	95-9181	Turret Body - Single Barb (Incl. Ref #'s 1-13 & 15)	3
*	95-9184	Turret Body - Barb x 1/2 NPT (Incl. Ref. #'s 1-13 & 20)	1
1	99-0811	Screw	1
2	99-0812	Upper Clamp	1
† 3	95-9191	O-Ring	1
4	95-9192	Split-Eyelet Body	1
5	95-9197	E-Clip	1
. 6	95-9196	Turret	1
† 7	95-9198	O-Ring	1
. 8	95-9200	Plug	1
† 9	95-9199	O-Ring	1
†10	99-0815	O-Ring Dust Seal	1
†11	99-0813	Seal	1
†12	41003	Diaphragm	1
13	95-9193	End Cap ASM	1
14	95-9202	Double Hose Barb	1

Ref	Part No.	Description	Qty
15	95-9201	Single Hose Barb	4
16	95-9187	Nozzle Dust Cap	22
		(Incl. Ref. #16)	
17	40998	Seat Gasket	33
18	95-9186	Nozzle Cap, 90°	11
		(Incl. Ref. #16)	
19	95-9188	TTJ10 Turbo TurfJet (Std.)	11
	95-9221	TTJ2 Turbo TurfJet (Optional)	11
	95-9222	TTJ4 Turbo TurfJet (Optional)	11
	95-9223	TTJ5 Turbo TurfJet (Optinal)	11
	95-9224	TTJ6 Turbo TurfJet (Optional)	11
	95-9225	TTJ8 Turbo TurfJet (Optional)	11
	95-9226	TTJ15 Turbo TurfJet (Optional)	11
20	95-9203	Hose Barb x 1/2" NPT	1
21	95-9314	90° Elbow, 1/2" FPT x 3/4" H.B.	1
22	95-9185	Turret Body Clamp	11
23	92-0045	Hose Clamp, 3/4" Hose	22
24	41340	Boom Hose, 3/4" x 50"	3
25	40506	Jumper Hose, 3/4" x 19"	6
26	95-2229	Jumper Hose, 3/4 " x 1"	2
27	99-0814	Pivot Pin, 303 SS	1

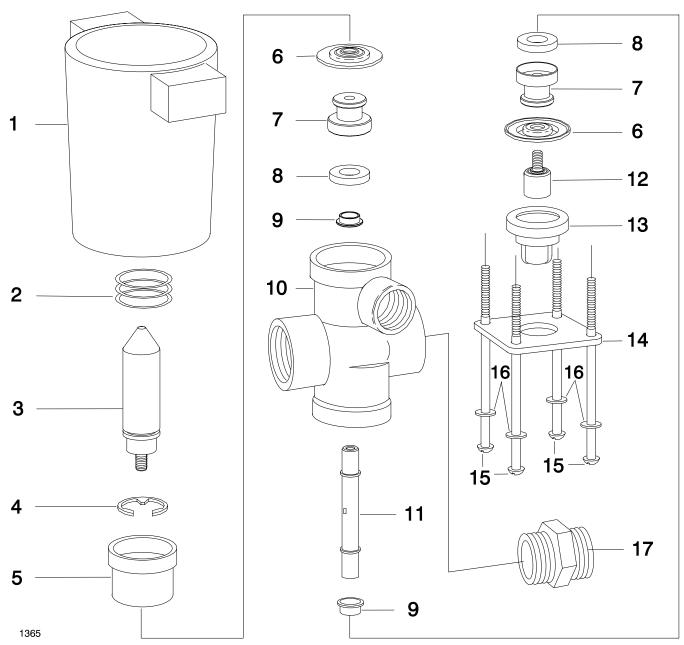
[†] Denotes parts in Seal Kit #99-0816 * Not Illustrated



CONTROL CONSOLE (3000)

Ref	Part No.	Description	Qty
1	42933	12-10 AWG Female Terminal	2
2	42934	16-14 AWG Female Terminal	1
3	42932	Insulated Female Terminal	3
4	99-0530	Solenoid Valve ASM	1
	99-0536	Single Solenoid	3
5	42936	Control Valve	1
6	42931	Male Fitting	1
7	42930	Tubing	1
8	42935	72" Cable ASM (Valve Hook-up)	1
9	42929	Union Fitting	2
10	41276	Push-On Terminal, 5/16	1
11	92-3716	Ring Terminal, 5/16	1
12	42928	96" Cable ASM (Encl. Hook-up)	1
13	92-3733	72" Extension Cable ASM	1
14	92-3679	Console Mount Bracket	1

Ref	Part No.	Description	Qty
15 16 17 18 19 20 21 22 23 24 25 26	42920 32144-10 42922 3256-2 3217-5 41230 42923 42921 42924 42925 42926 42927 42937 42764	Mounting Bracket Washer Hd. Screw, 1/4 x 5/8 Knob Flat Washer, 1/4 Hex Nut, 1/4 Hose Clamp Master Switch Boom Switch Pressure Gauge (PSI) Fuse Holder 15-AMP Fuse Pressure Adjust Switch Console 20-AMP Fuse (For Fuse Block)	1 2 2 2 2 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1
27	93-1042	Female Gauge Fitting	1



SOLENOID VALVE (99-0536)

Ref	Part No.	Description	Qty
1	95-9317	Coil ASM-Nylon Encapsulated	1
2	†	Spring - Stainless Steel	1
3	95-9318	Armature - Stainless Steel	1
4	95-9319	Retaining Ring - Steel, Plated	1
5	93-1031	Upper Diaphragm House (blk)	1
6	†	Diaphragm - Viton	2
7	93-1034	Seal Washer - Retainer, SS	2
8	†	Seal Washer - Viton	2

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