

De-Icer Pro DI-4000 Series SCS 440



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WARNING: NEVER LOWER OR RAISE RACK UNTIL BOOMS ARE FULLY EXTENDED. SERIOUS PROPERTY DAMAGE OR PERSONAL INJURY MAY RESULT.

WARNING: DURING STORAGE, GASES CAUSED BY REACTIVE CHEMICALS LEFT IN THE PUMPING SYSTEM MAY PRODUCE PRESSURE. THE COMPLETE DE-ICER SYSTEM SHOULD REMAIN EMPTY. OPEN THE ON-LOAD VALVE, THE OFF-LOAD VALVE, THE BY-PASS VALVE, AND ALL DRAIN VALVES TO ALLOW THE PUMPING SYSTEM AND PRODUCT TANK TO VENT TO THE ATMOSPHERE.

1. Off-Load the product tank (if necessary).
2. At the base of the product pump, open the small valve and drain the pumping assembly.
3. Drain the booms (See Figure 13).
 - a. From the control console, open the boom shut-off valves.
 - b. On a level surface, extend the booms and raise them slightly.
 - c. At the hinge end of each boom, open the small valve and drain the boom hoses.
 - d. At the end of the rack, open the small valve and drain the rack hose.
4. Drain the Y-Strainers by removing Y-Strainer caps and screens and reinstall.
5. Drain the Hose Reel assembly.
6. Drain the Flusher Assembly.
 - a. Open the Flusher Valves and drain the flusher assembly. (Valve handles must be manually opened and closed at the front of the truck & on the left & right side of the truck.)
 - b. Open the small valves on the flusher manifolds and drain the manifolds.
7. Close all of the drain valves.

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C. Clean the Unit

Consult the manufacturer of de-icing chemicals or liquids other than de-icing chemicals about the reactive status of those chemicals. Use each chemical manufacturer's recommended guideline (detergents or methods) for cleaning equipment of their chemicals.

1. Fill the product tank with the specific chemical manufacturer's cleaning solution.
2. Agitate the cleaning solution through the product tank.
 - a. Se the De-Icer unit Valve Handle Positions to Agitate liquids. (See Figure 14)

VALVE A.	BYPASS	SILVER	OPEN
VALVE B.	SUMP	RED	OPEN
VALVE C.	SUCTION	BLUE	CLOSED
VALVE D	PRESSURE	BLACK	CLOSED

b. Procedure

CAUTION: Never engage hydraulic pump when engine speed is more than 1200 rpm.

1. Switch hydraulic pump switch to On.

CAUTION: Do not run product pump dry. Excessive heat and component wear will cause pump failure.

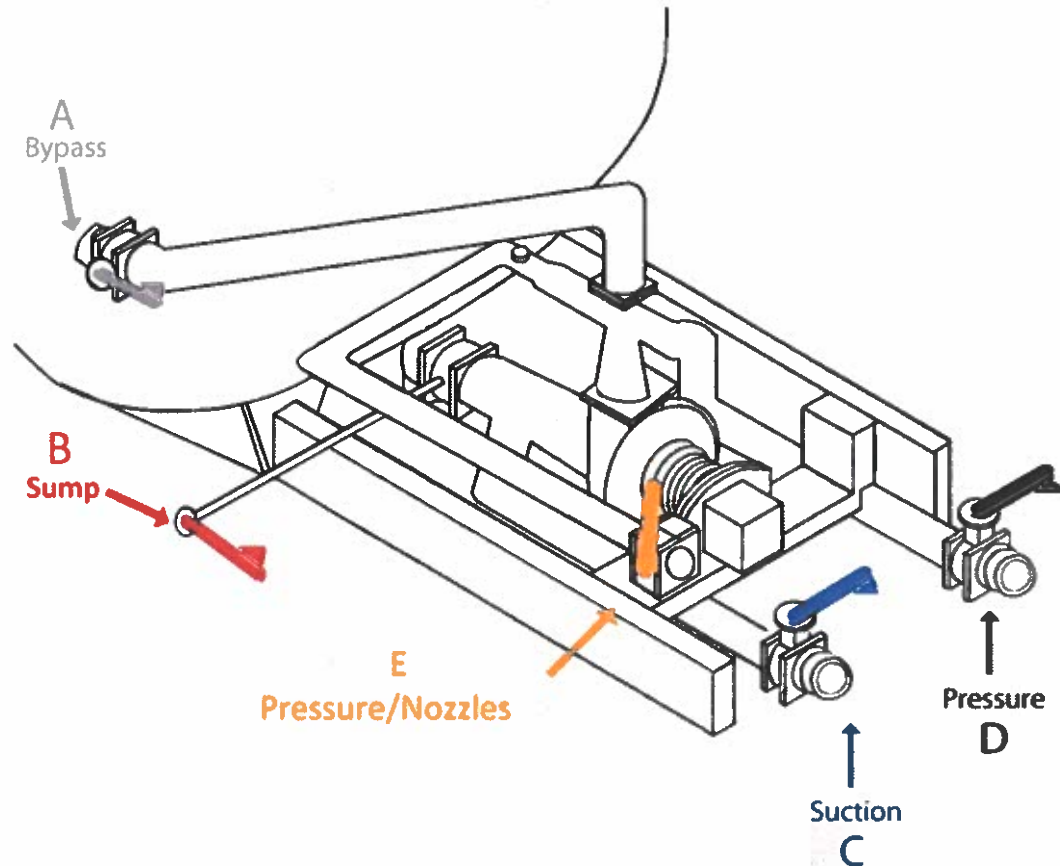
2. Switch the product pump switch to On if applicable.
3. On the Computer Console, turn the Master Switch on and hold the Increase/Decrease Switch in the Increase Position. The System will begin pumping at the spray bar pressure displayed on the Console.
4. Increase the engine speed to operating RPM.

Note: Product pump speed varies directly with the vehicle engine RPM.

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Valve Positions For Agitation

Valve A
Valve B
 Valve C
 Valve D
Valve E

Bypass
Sump
 Suction
 Pressure
Pressure/Nozzles

Open
Open
 Closed
 Closed
Closed

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3. Reset the Valve Handles to Spray and alternate spraying the cleaning solution through the booms and nozzles, flushers, and the hose reel.
4. When the product tank is empty or spraying is complete, release the Increase/Decrease switch and turn off the Master Switch.

D. Rinse the Unit using only water.

To prevent detergent residue from drying or crystallizing in the system, one or more complete tanks of clean water should be flushed through the unit.

1. Fill the product tank with clean water.
2. Agitate water through the product tank.
3. Reset the Valve Handles to Spray and alternate spraying at least one complete tank of water through the booms and nozzles, flushers, and the hose reel.
4. When the product tank is empty or spraying is complete, shut down the unit.

E. Empty all water from the unit.

1. Off-Load the product tank (if necessary).
2. At the base of the product pump, open the small valve and drain the pumping assembly.
3. Drain the Y-Strainers by removing Y-Strainer caps and screens and reinstall.
4. Drain the Booms, Flusher Assembly, and the Hose Reel Assembly as needed.

F. During storage, the system should remain empty. Open the On-Load valve, the Off-Load valve, the By-Pass valve, and all drain valves to allow the pumping system and product tank to vent to the atmosphere.

G. Use a high pressure washer with detergent to clean all outside surfaces of the tank, booms, pumping system, and running gears.

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13. Product Pump

Open the product pump drain valve and all of the manifold valves to empty the product pump and eliminate condensation.

14. Pressure Relief

A. General

While vehicle engine is not running, pressures in the pneumatic and hydraulic systems may be reduced by the following steps.

Note: Pressure relief procedures are performed while the "hydraulic pump" switch is in the OFF position.

B. Primary Hydraulic System

On the computer Console, turn the Master Switch on and hold the Increase/Decrease Switch in the Increase Position. (This opens the PWM Valve to relieve oil pressure in the primary hydraulic system.)

C. Secondary Hydraulic System

1. Turn "HYDRAULIC PUMP" switch OFF.
2. Operate all boom and nozzle switches that control secondary hydraulic valve banks. (This will relieve hydraulic oil pressure in the secondary hydraulic hoses.)

D. Pneumatic System

1. Close air supply shut off valve.
2. Relieve air pressure by operating all boom and nozzle functions which control hydraulic valve banks.
3. Open drain on air filter.
4. Set parking brake.
5. Empty all vehicle chassis air tank(s).

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Appendix A

Application Rate Table 1

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Constants

Unit: Ohare (Shop Unit #35)

Date: 10-20-2013

Batts I.D. 99482

Boom 1 Cal: 240

Boom 2 Cal: 120

Boom 3 Cal: 240

Speed Cal: 750

Meter Cal: 720

Valve Cal: 63

Rate 1 Cal: 1.0 Gallon

Rate 2 Cal: 0.5 Gallon

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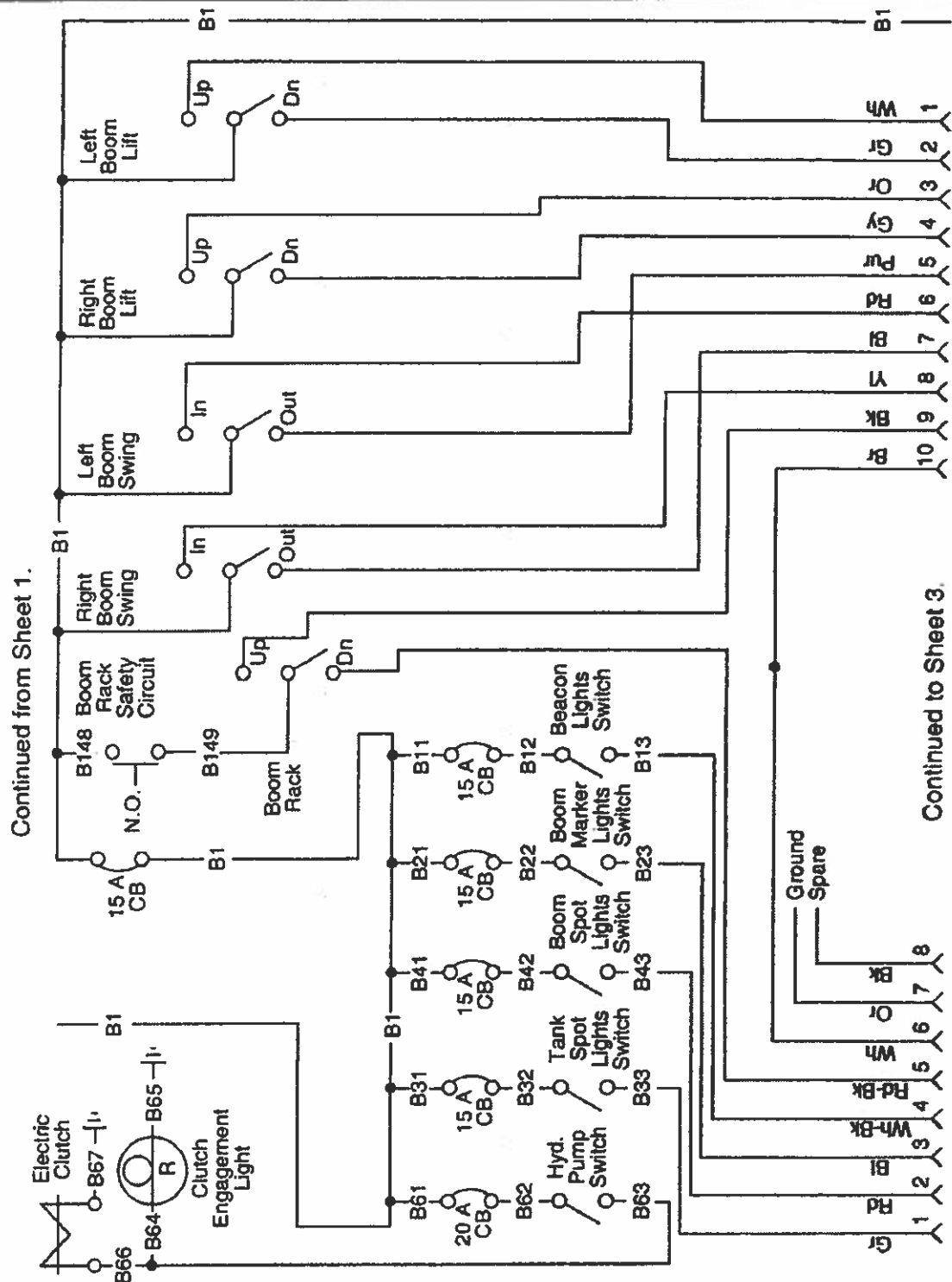
Appendix B

Periodic Maintenance Table 1

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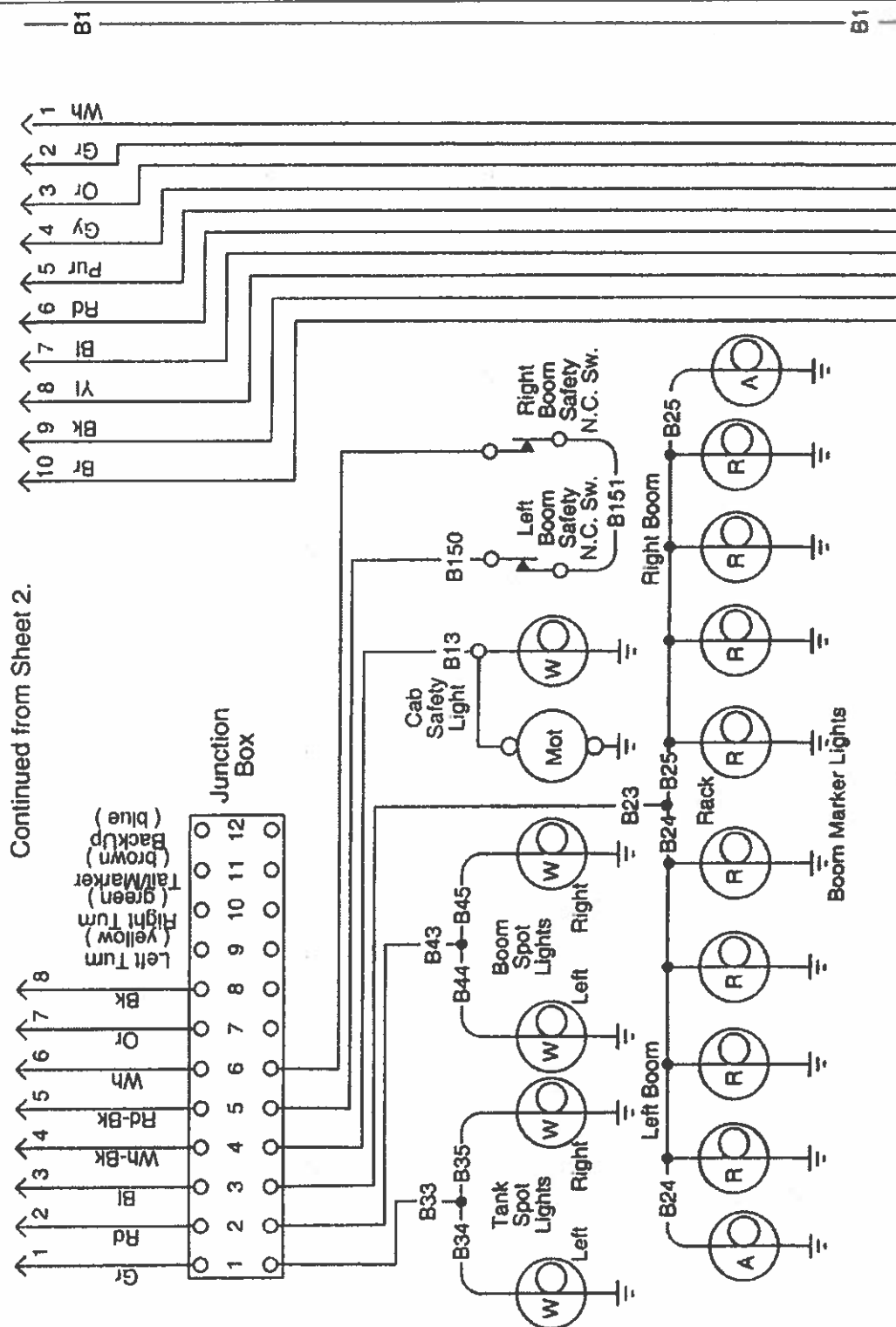


De-Icer Pro Wiring Diagram
Figure 11(Sheet 2)

De-Icer Pro DI-4000 Series SCS 440



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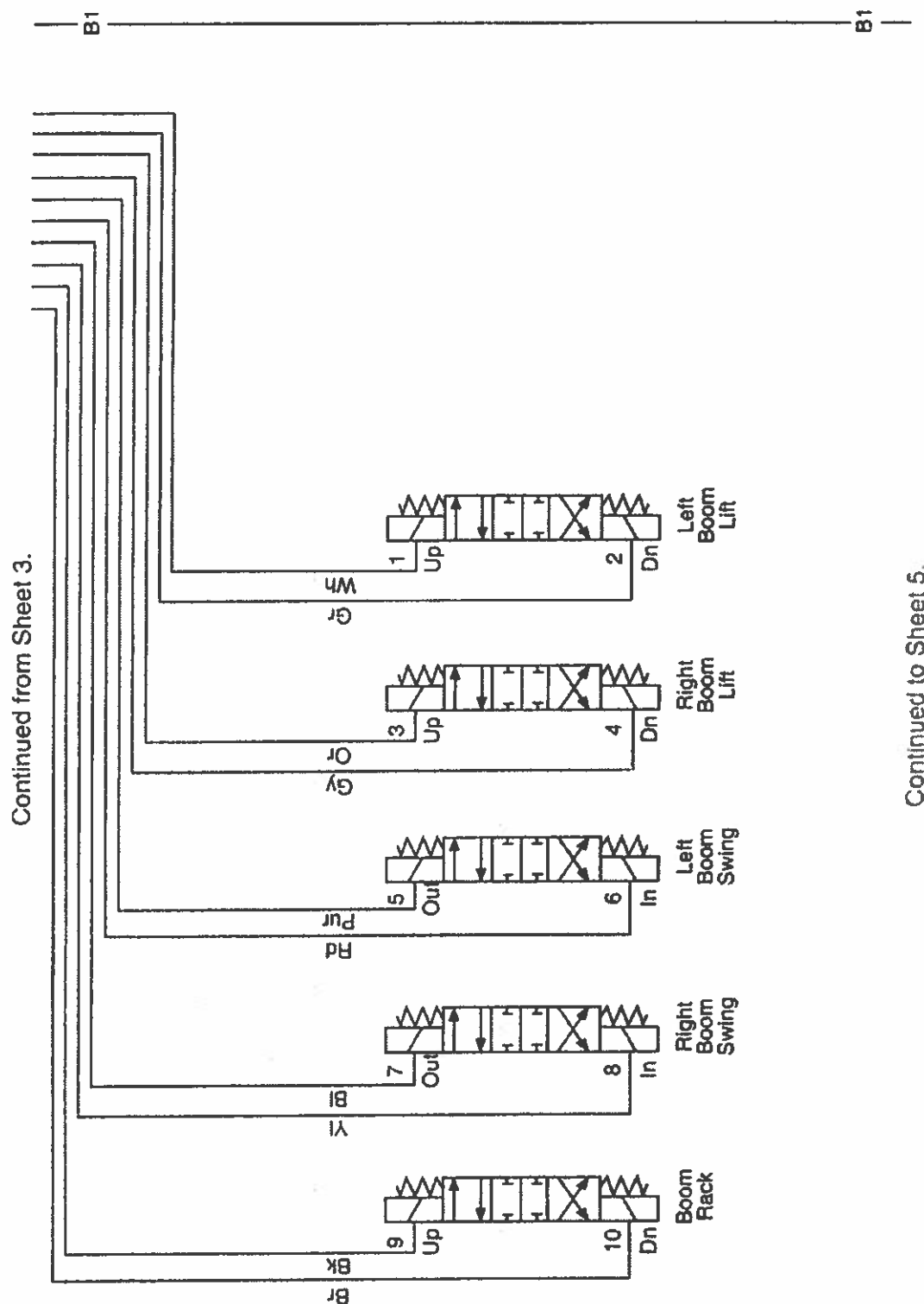


De-Icer Pro Wiring Diagram
Figure 11(Sheet 3)

De-Icer Pro DI-4000 Series SCS 440



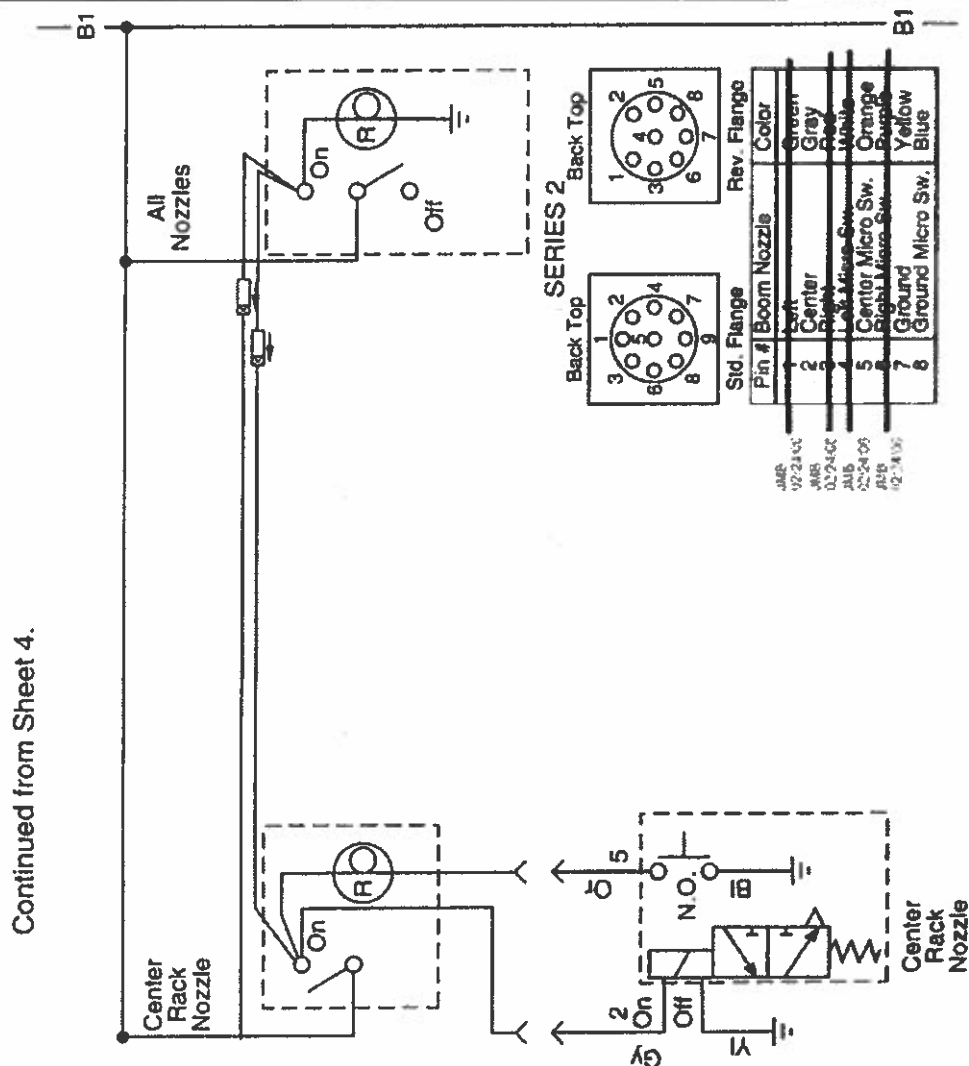
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De-Icer Pro Wiring Diagram
Figure 11(Sheet 4)

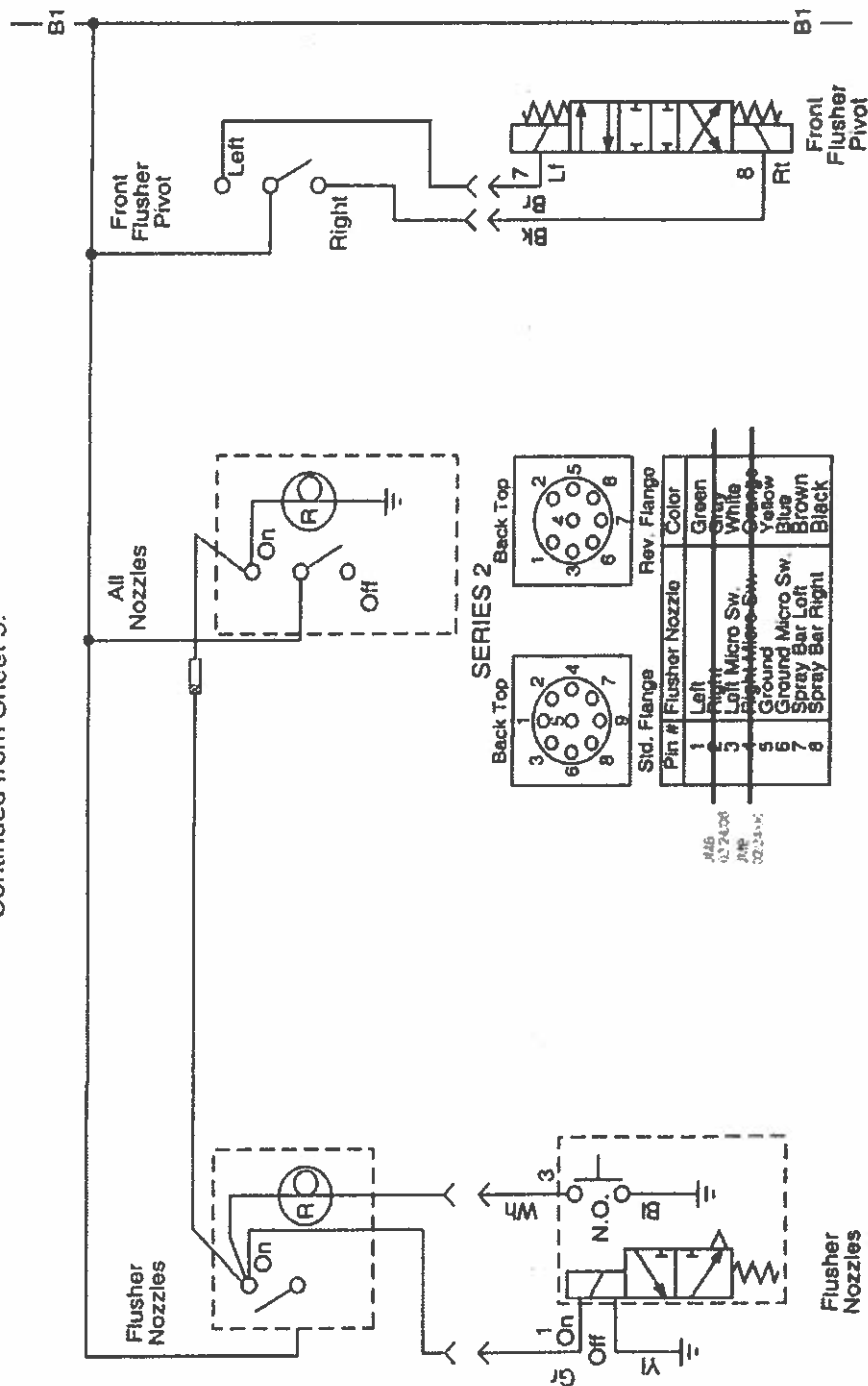
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De-Icer Pro Wiring Diagram
Figure 11(Sheet 5)

Continued from Sheet 5.



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DETAILED PARTS LIST

1. General

This section contains and explanation of each column in the detailed parts list. Illustrations and detailed parts lists of all assemblies and subassemblies used in the De-Icer.

A. Figure and Item Number

This column provides a cross-reference between the parts listed and the illustrations. To find a view of the part listed and its visual relationship to the assembly, locate the figure and item number in the list, then refer to the indicated illustration and locate the part by its item number. To find a part number and description in the parts list, locate the part on an illustration, note the item number, then refer to the parts list and locate the applicable part number and description.

B. Part Number

This column lists the part number necessary for ordering repair parts.

C. Nomenclature

This column lists the description of each item in the parts list. The identifying noun or key word is the first word in the nomenclature column. The remainder of this column contains an expanded description to assist in completely identifying the item.

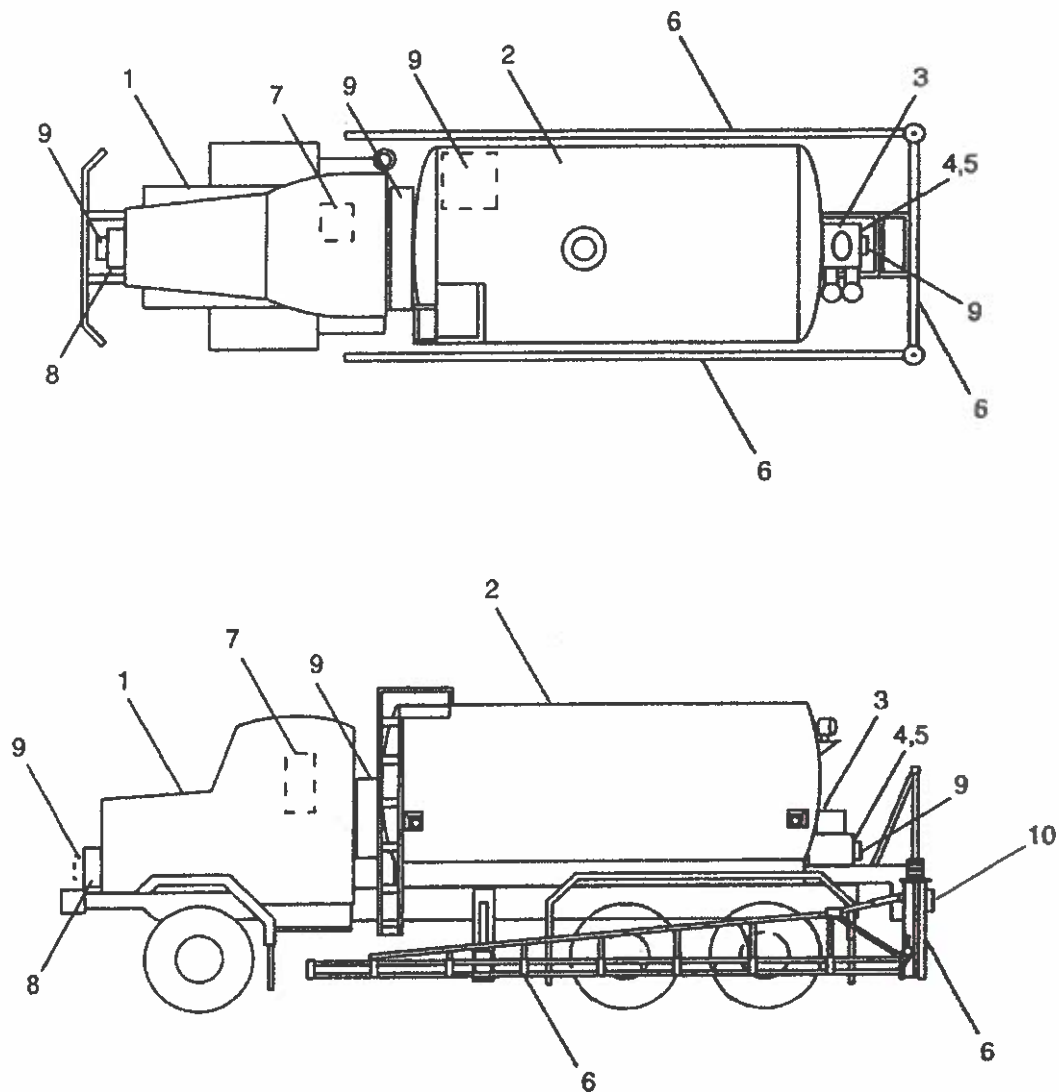
D. Units Per Assembly

This column indicates the quantity of each part required to complete the next higher assembly.

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Final Assembly
Figure 1

De-Icer Pro DI-4000 Series SCS 440



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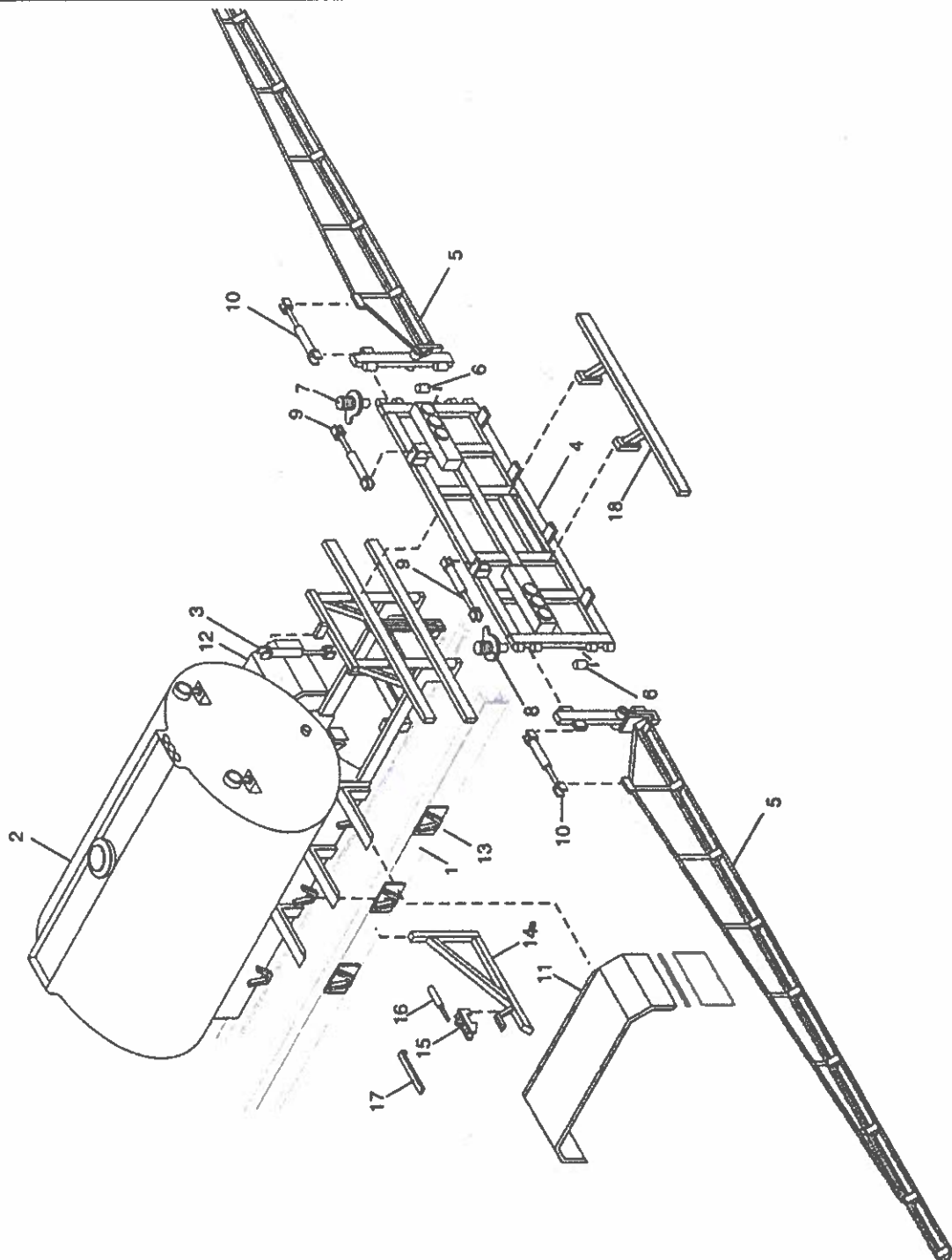
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
1-		Final Assembly, Batts De-Icer Pro	1
1		Truck/Chassis	1
2		De-Icer Tank/Frame Assembly (See Fig. 2)	1
3		Pump Installation, De-Icer (See Fig. 3)	1
4	003200991	Pump Assembly, De-Icer (See Fig. 4)	1
5		Shut-Off Valve Installation, De-Icer (See Fig. 5)	1
6		Boom Plumbing Installation, De-Icer (See Fig. 6)	1
7		Cab Control Console Assembly (See Fig. 8)	1
-	025005078	Console, Batts Control (See Fig. 8)	1
-	003401001	Console, DjSC 100 (See Fig. 8)	1
8		Electromagnetic Clutch Assembly (See Fig. 10)	1
9		De-Icer Hydraulic System (See Fig. 11)	1
10		De-Icer Electrical Assembly (See Fig. 17)	1

-Item Not Illustrated

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De-Icer Tank/Frame Assembly
Figure 2

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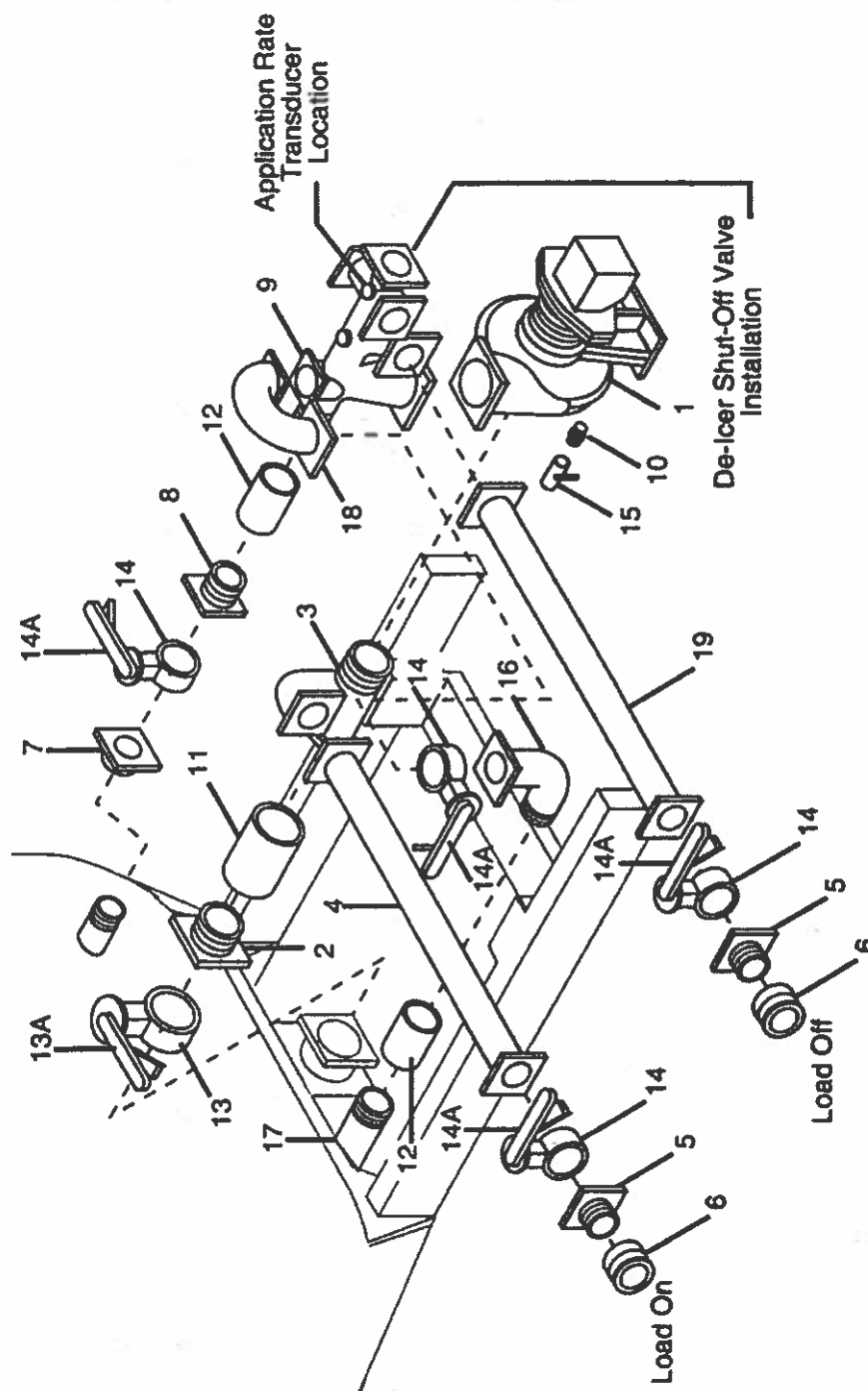
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
2-		De-Icer Tank/Frame Assembly	1
1		Frame, Truck	1
2	007404000	Tank, De-Icer Product	1
3	012600024	Cylinder/Horizontal Height Adjuster	1
4	025000030	Rack, Boom	1
5	025000027	Boom, Tilt-Wing	2
6	025000009	Pin, Boom Hinge	2
7	025000002	Break Back, Right Side	1
8	025000003	Break Back, Left Side	1
9	012602012	Cylinder, 12 Boom Swing IN & OUT	2
10	012602008	Cylinder, 8 Boom Lift UP & DOWN	2
-	012601402	Pin, Cylinder	10
-	012600009	Pin, Cylinder Cotter	20
11	025002084	Fender, Left Side Rear	1
12	025002085	Fender, Right Side Rear	1
-	057668661	Kit, Mud Flap	4
13	025002030	Bracket, Tank Tie Down	6
14	025000150	Bracket, Boom Transport	2
15	025000149	Latch, Boom Transport Bracket	2
16	075500241	Cylinder, Air, Boom Transport Bracket	2
17	025000175	Guard, Air Cylinder,	2
		Boom Transport Bracket	
18	025025098	Protector, Boom Rack Nozzle (Optional)	1

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De-Icer / Flusher Pro Pump Installation
Figure 3

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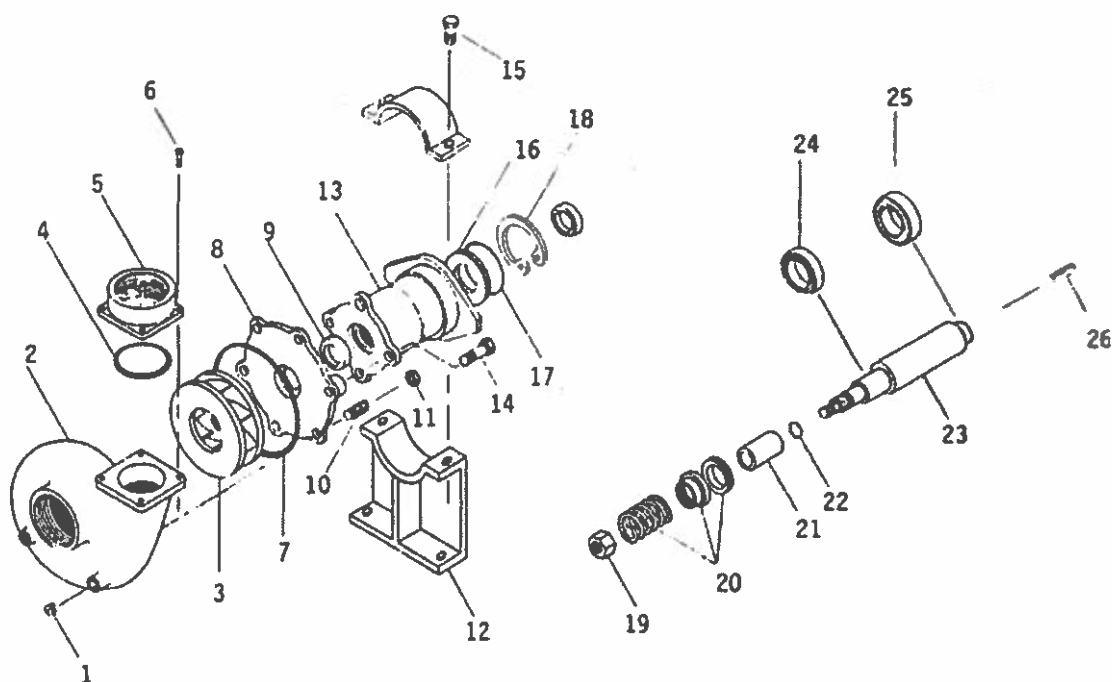
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
3-		Pump Installation, De-Icer/ Flusher	1
1	003200052	Pump Assembly, 8200 F-HD	1
2	025002015	Flange, 4 Suction Hose Barb	1
3	025002040	Manifold, Suction Tee	1
4	025002062	Manifold, Suction Extension	1
5	025002002	Flange, 3 Male Valve	2
6	010800058	Coupler, 3 Cam-Lok	2
-	010800064	Cap, Cam-Lok	2
7	025002004	Flange, 3 Female Valve	4
8	025002024	Flange, 3 Pressure Hose Barb	1
9	025002073	Manifold, Pressure Union	1
10	009700275	Nipple, 3/8 Pipe Hex	1
11	003700172FT	Hose, 4 Suction	AR
-	003700400	Clamp, 4 Hose	2
12	003700171FT	Hose, 3 Pressure	AR
-	003700300	Clamp, 3 Hose	4
13	046400001	Valve, 4 Butterfly	1
13A	046400002	Handle, Valve(State Color)	1
14	046400003	Valve, 3 Butterfly	3
14A	046400004	Handle, Valve(State Color)	3
15	009500050	Valve, 3/8 Ball, Stainless, Pipe Thread	1
16	025002055	Manifold, Flusher Extension	1
17	025002080	Manifold, Flusher Tank	1
18	025002097	Manifold, Primary Flusher Extension	1
19	025002099	Manifold, Pressure Extension	1

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Pump Assembly
Figure 4

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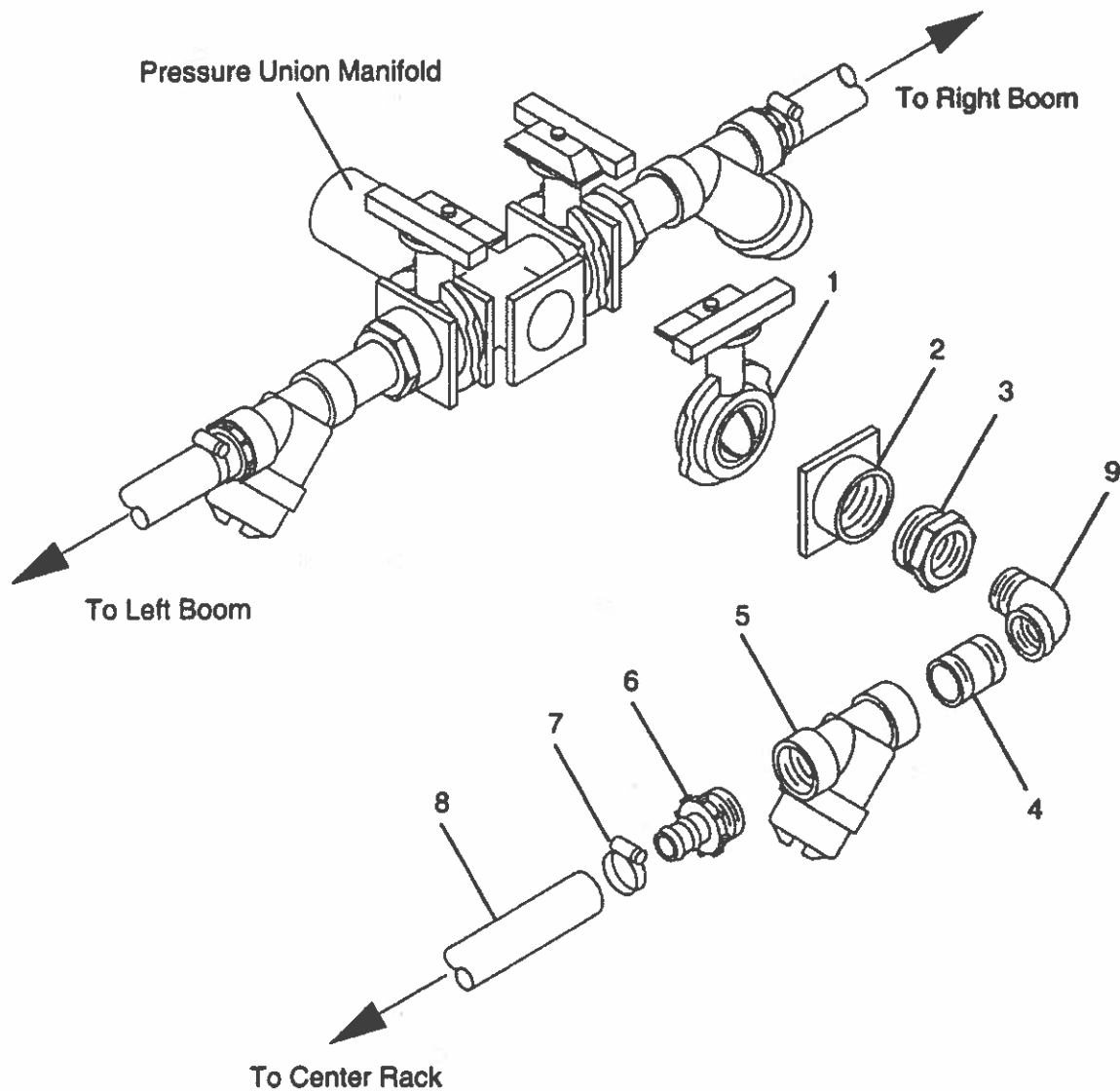
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FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
4-	003200991	Pump Assembly, 8200 F-HD	1
1	003201071	Plug, Pipe	2
2	003201053	Volute	1
3	003201057	Impeller, 8 DIA.	1
4	003200587	O-Ring, Flange	1
6	003201075	Bolt & Nut, Flange	4
7	Not Available	O-Ring, Cover Plate	1
8	003201054	Plate, Cover	1
9	003201064	Seal, Shaft	1
10	003201062	Stud	6
11	Not Available	Nut	6
12	003201070	Pedestal Assembly	2
13	003201069	Housing, Bearing	1
14	003201063	Screw, Cap	4
15	Not Available	Bolt & Nut	4
18	003201056	Snap Ring	1
19	003200800	Lock Nut	1
20	003201068	Seal Assembly, Rotary	1
21	003201059	Sleeve	1
22	003201072	O-Ring, Shaft	1
23	003201061	Shaft	1
24	003201073	Bearing, Small	1
25	003201074	Bearing, Large	1
26	003201067	Spacer	1

-Item Not Illustrated

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De-Icer Shut-Off Valve Installation
Figure 5

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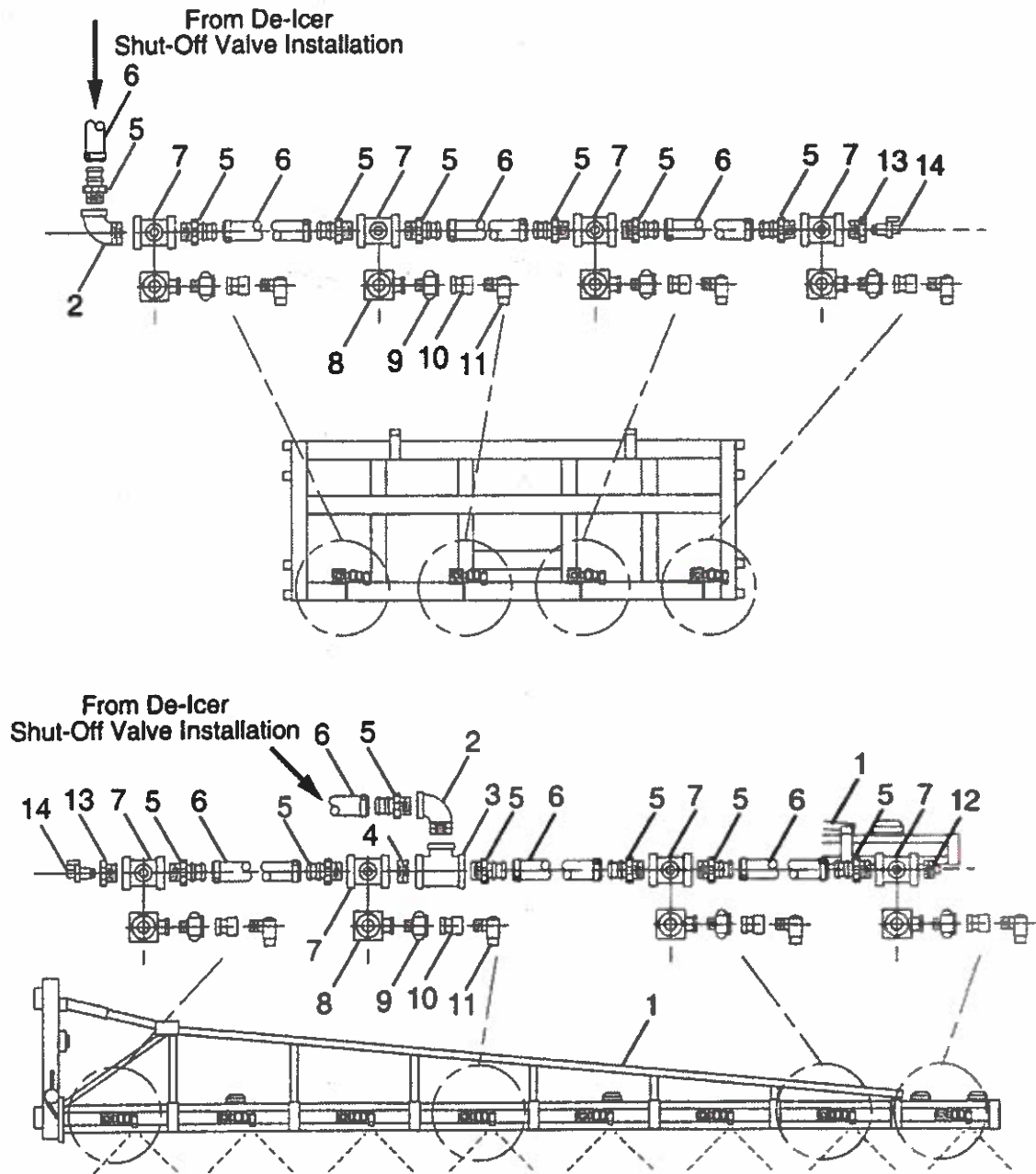
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
5-	058212548	De-Icer Shut-Off Valve Installation	1
1	046400011	Valve, 3 Electric / Pneumatic Butterfly	3
2	025002004	Flange, 3 Female Valve	3
3	008900376	Bushing, 3 X 2 Reducer	3
4	008900313	Nipple, 2 NPT Close	3
5	010800095	Strainer Assembly, "Y" 2	3
-	010800033	Strainer Housing 2	3
-	010800032	O-Ring	3
-	010800103	Filter	3
-	010800031	Cap	3
6	010800099	Barb, 2 Male Thread X 1- 1/2 Shank	3
7	003700200	Clamp, 2 Hose	6
8	003700164FT	Hose, 1-1/2 Pressure	AR
9	008900524	Elbow, 90 Degree 2 Street	1

-Item Not Illustrated

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De-Icer Boom Plumbing Installation
Figure 6

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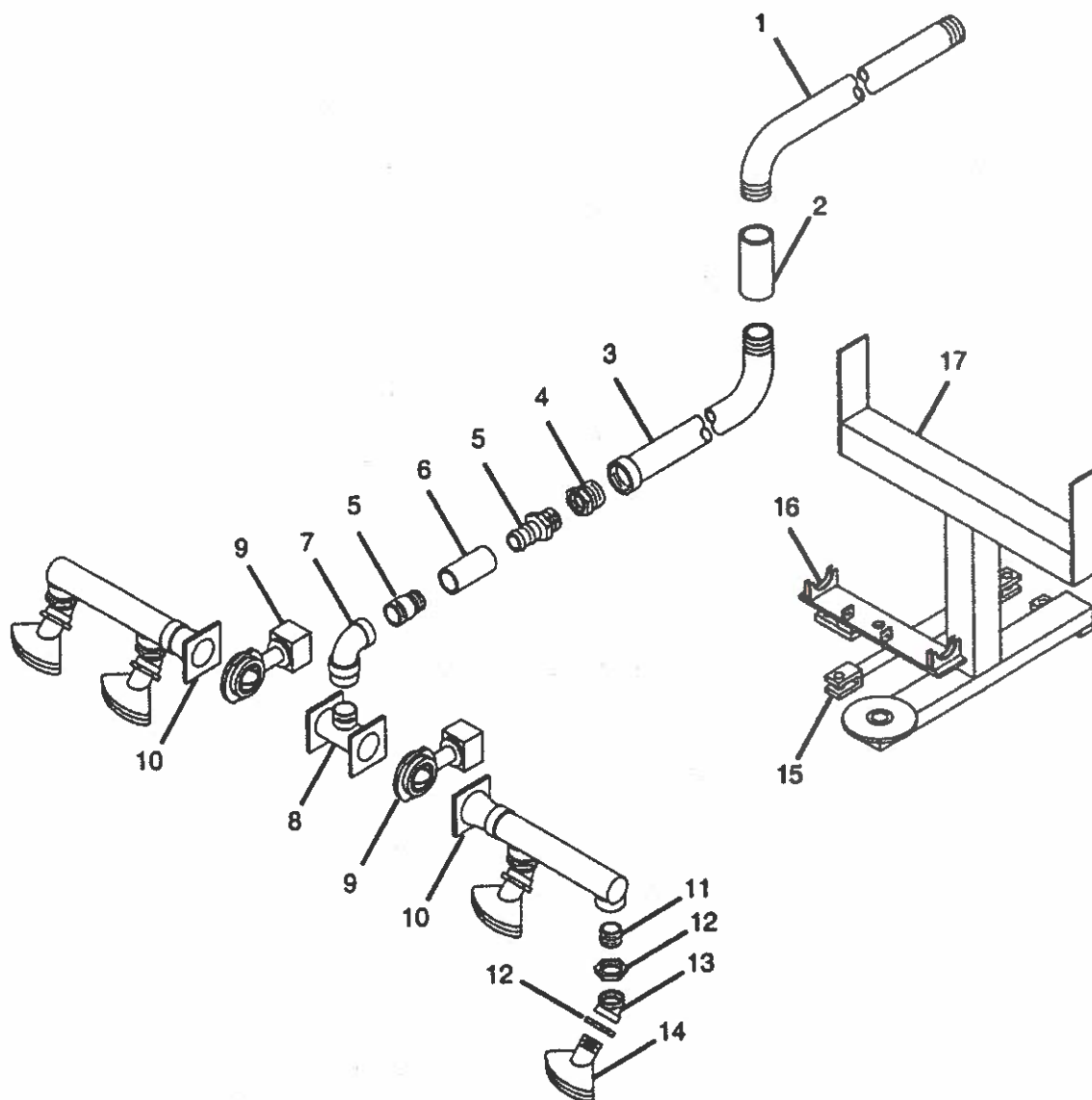
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
6-	055412400	Boom Plumbing Installation, De-Icer	1
-	055412402	Boom Plumbing Kit, (Consists of items 1 through 14)	2
1	025000027	Boom, Tilt Wing	2
2	008900523	Elbow, 90 degree 1-1/2 Street	3
3	008900443	Tee, 1-1/2 X 1-1/2 NPT	2
4	008900312	Nipple, 1-1/2 Close	2
5	010800097	Barb, 1-1/2 Male Thread X 1-1/2 Male Shank	37
6	003700164FT	Hose, 1-1/2 Pressure	AR
-	003700028	Clamp, Hose # 28	40
7	008900442	Tee, 1-1/2 X 3/4 Reducer	20
-	004900031	U-Bolt 2-1/2	46
-	004900300	Nut & Washer, 1/4	92
8	000500101	Valve, Nozzle Check	20
-	000500102	Kit, Nozzle Check Valve, Rebuild	AR
9	010200012	Connector, Nozzle Quick	20
10	010200004	Adapter, Nozzle	20
11	003300058	Nozzle, Size RA 60	20
-	003300054	Nozzle, Size RA 40	20
12	008900468	Plug, 1-1/2 NPT	2
13	008900651	Bushing, 1-1/2 x 3/8 Reducer NPT	3
14	004800041	Valve, 3/8 Petcock	3

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De-Icer/Flusher Manifold Assembly
Figure 7

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FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
7-		Manifold Assembly, De-Icer / Flusher	1
1	025002144	Manifold, Flusher Tank	1
2	003700171FT	Hose, 3	AR
-	003700300	Clamp, Hose 3	4
3	025002145	Manifold, Cab	1
4	008900376	Bushing, 3 x 2 Reducer	1
5	009100009	Barb, 2" Hose	2
6	003700170FT	Hose, 2 Rigid	AR
-	003700200	Clamp, Hose 2	2
7	007800004	Elbow, 2 Female Swivel	1
8	025002146	Manifold, Front Tee Flusher	1
9	046400011	Valve, 3 Electric / Pneumatic Butterfly	2
10	025002151	Manifold, Front Flusher	2
11	008900313	Nipple, 2 NPT Close	4
12	004800036	Nut, 2, Jam	8
13	008900601	Elbow, 45 degree 2	4
14	045800007	Nozzle, Flusher Fan	4
15	012602012	Cylinder, 12 Front Tee Flusher	1
16	025025084	Mount, Tee Flusher Manifold	1
17	025025085	Table, Tee Flusher Manifold	1

-Item Not Illustrated

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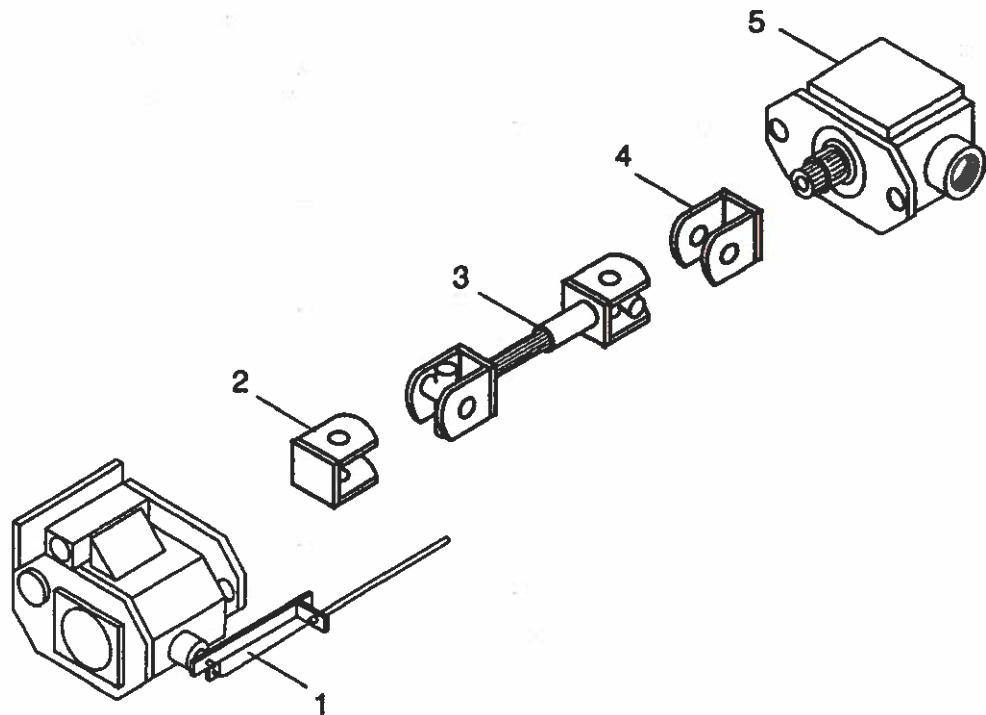
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FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
8-		Cab Control Console Assembly	1
1	025005078	Console, Batts Control	1
-	012900103	Breaker, 15Amp Circuit	5
-	012900104	Breaker, 20 Amp Circuit	1
2	003401001	Console, DjCCS 100 Control	1
3	003401002	Console, DjCMS 100 Monitor	1
4	003401007	Switch, Module	1
5	S9980X	Lamp, Console	2
6	025005066	Electrical Bundle, Boom #5500, 192 LG	1
7	025005068	Electrical Bundle, Electrical Lighting 264 LG	1
8	025005076	Electrical Bundle, Boom Shut - Off #3300, 216 LG	1
9	012900105	Switch, SPDT, White Center Return Rocker	5
10	012900106	Switch, SPDT, Black Center Return Rocker	2
11	012900101	Switch, SPST, 20Amp	1
12	012900102	Light, Red Warning 24V	1
13	012900110	Switch, Center Return SPDT, 20Amp	1
14	012900107	Switch, SPST, Black Rocker w/ Indicator	9
15	012900108	Switch, SPST, White Rocker w/ Indicator	2
16	025005077	Electrical Bundle, Flusher Shut - Off #4400, 216 LG	1
-	025005082	Kit, Decal, De-Icer / Flusher, DjCCS / DjCMS Console	1

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Electromagnetic Clutch Assembly
Figure 11

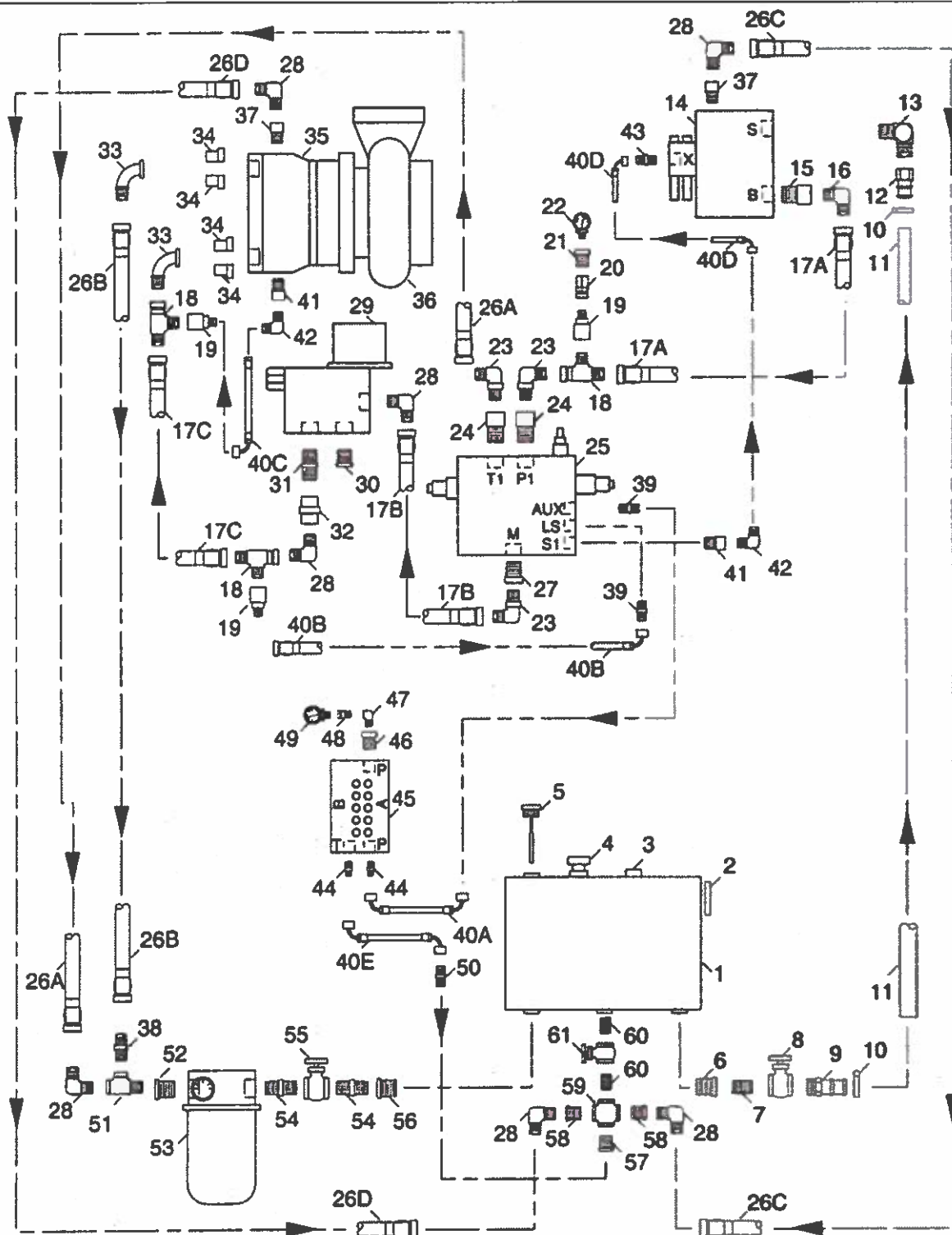
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FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
11		Power Take-Off Installation	1
1	007700308	Assembly, Power Take-Off	1
2	030300001	Flange, Yoke 1 1/4 Key	1
3	030300003	Shaft, Drive w/ Cross & Bearings	1
4	030300002	Flange, Yoke 7/8 Spline	1
5	075500007	Pump, Hydraulic	1

-Item Not Illustrated

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De-Icer Hydraulic Assembly
Figure 12

De-Icer Pro DI-4000 Series SCS 440



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FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
12-		Hydraulic Assembly, De-Icer	1
1	025025069	Hydraulic Reservoir Tank 50 Gal.	1
2	025700003	Gauge, Sight Temp	1
3	025700005	Cap, Fill	1
4	025700004	Vent, Breather	1
5	025700002	Dip Stick, Magnetic	1
6	009700331	Busing, 2 x 1-1/2, Reducer	1
7	008900312	Nipple, 1-1/2 Close	1
8	008900630	Valve, 1 1/2 NPT Gate	1
9	008900584	Barb, 1 1/2 Hose x 1 1/2 Male Thd	1
10	003700200	Clamp, Hose	AR
11	007600151FT.	Hose, Suction 1 1/2" x 78"	AR
12	075500257	Barb, 1 1/2 Female Jic x 1 1/2 Male Hose	1
13	075500218	Elbow, 1 1/2 O-Ring Pipe x 1 1/2 Jic	1
14	075500007	Pump, Hydraulic	1
		PTO Assembly	1
-	007700308	Assembly, Power Take-Off	1
-	030300001	Flange, Yoke 1 1/4 Key	1
-	030300003	Shaft, Drive w/ Cross & Bearings	1
-	030300002	Flange, Yoke 7/8 Spline	1
15	075500258	Adapter, 1 1/2 Male O-ring x 1 Female Pipe	1
16	075500259	Elbow, Male 90, 3/4 Jic x 1 Male Pipe	1
17	021800509FT	Hose, 3/4" High Pressure Hydraulic, A. Length 176" C. Length 204" B. Length 27 "	AR
18	075500210	Tee, Swivel, 3/4 Female Jic x 3/4 Male Jic	3
19	075500213	Adapter, Swivel, 3/4 Female Jic x 3/8 Male Jic	3
20	009700434	Swivel, 3/8 Female Jic x 3/8 Female Pipe	1
21	009700287	Bushing, 3/8 x 1/4 Reducer	1
22	021800204	Guage, 0-5,000 Lbs., Silicon Filled	1
23	075500228	Elbow, Male 90, 3/4 Jic x 3/4 O-ring Boss	3

-Item Not Illustrated

De-Icer Pro DI-4000 Series SCS 440



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FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
12- 24	075500222	Hydraulic Assembly, De-Icer (Continued) Adapter, 1 Male O-ring x 3/4 Female O-ring	1 2
25 26	075500108 021800508FT	Assembly, Hydraulic Manifold Valve Hose, 3/4" Hydraulic Pressure A. Length 156" C. Length 60" B. Length 252" D. Length 240"	1 AR
27	075500217	Bushing, 1 O-Ring x 3/4 Pipe	1
28	009700107	Elbow, Male, 90, 3/4 Tube x 3/4 Pipe	7
29	003402224	Servo, Hydraulic	1
30	009700304	Plug, 3/4 Hex Head	1
31	009700281	Nipple, Hex, 3/4"	1
32	009700326	Coupling, 3/4	1
33	075500231	Elbow, 90 Bent Tube, 1 Flange x 3/4 Male Jic	2
34	075500230	Flange Set, 1 O-ring Anchor	2
35	075500029	Motor, Hydraulic	1
36	003200991	Pump, Assembly 8200	1
37	075500202	Adapter, 3/4 Female Pipe x 3/4 Male O-ring	2
38	009700021	Connector, Male 3/4 Jic x 3/4 Pipe	1
39	075500205	Nipple, Hex 3/8 Jic x 3/8 O-Ring	2
40	021800504FT	Hose, 3/8" Hydraulic Pressure A. Length 20 " D. Length 176" B. Length 80 " E. Length 144" C. Length 12 "	AR
41	075500226	Adapter, 1/4 Female Pipe x 3/8 Male O-ring	2
42	009700096	Elbow, 90, 3/8 Tube x 1/4 Pipe	2
43	075500256	Nipple, Hex 1/4 Jic x 1/4 O-Ring, Restricted	1
44	075500234	Connector, 5/8 Str x 3/8 Jic	2
45	075500110	Block, 5-Station Control Valve	1
-	075500109	Solenoid, Valve Spool	5
-	075500235	Connector, 1/2 Str x 1/4 Jic	10
-	075500236	Plug, 5/8 Str	1
-	009700302	Plug, Hex Head, 3/8	1
46	075500237	Bushing, 5/8 Str x 1/4 Pipe Reducer	1
47	009700207	Elbow, 1/4 Str	1
48	009700511	Swivel, 1/4	1
49	021800201	Gauge, 0-3000 PSI, Silicone Filled	1

-Item Not Illustrated

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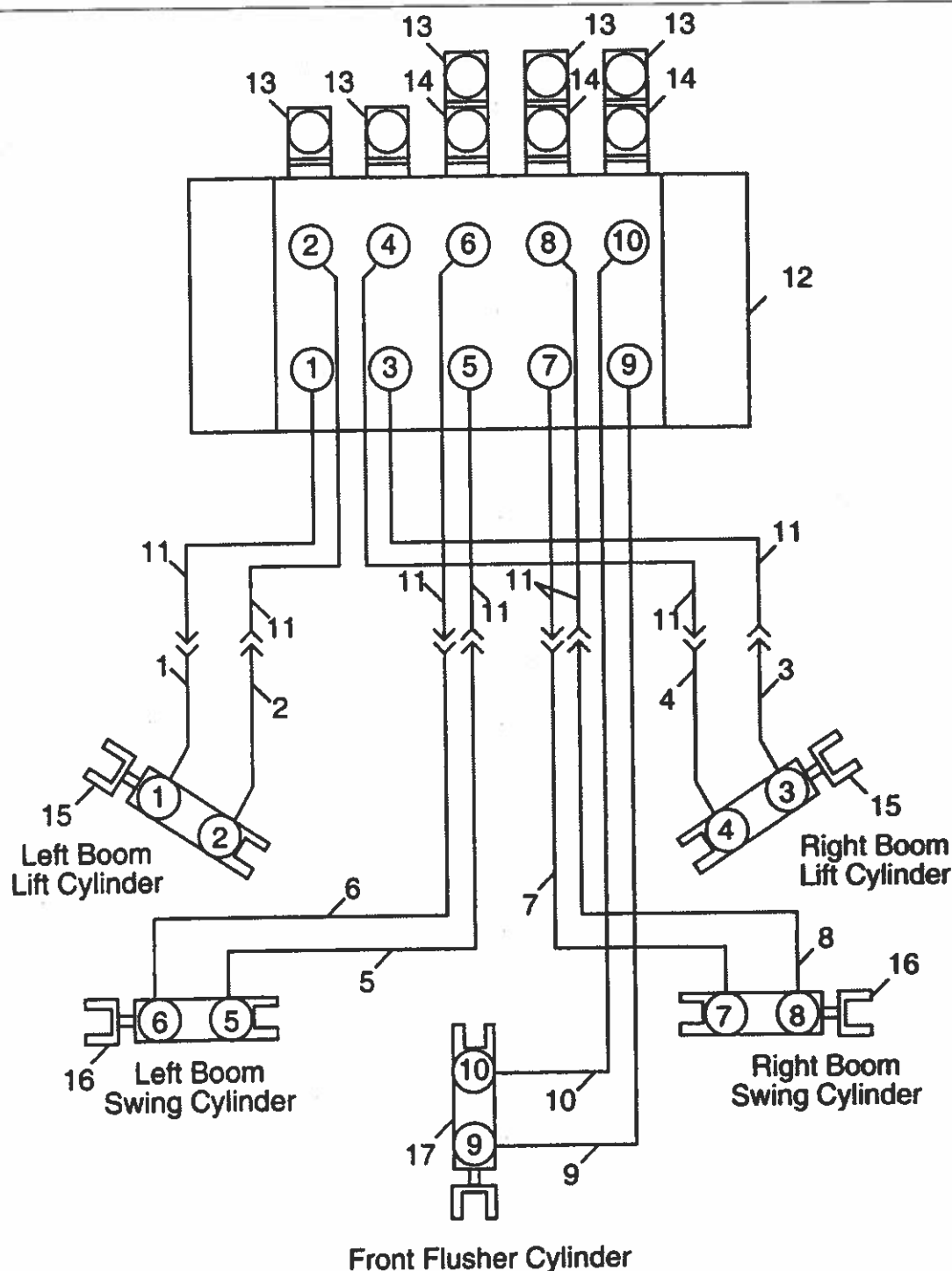
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
12-		Hydraulic Assembly, De-Icer (Continued)	1
50	009700013	Connector, 3/8 Tube x 1/2 Pipe	1
51	009700248	Tee, Male Run, 3/4	1
52	009700297	Bushing, 1 1/4 x 3/4 Reducer	1
53	007700040	Element, Return Line Filter	1
		Gauge, 0-145 PSI	1
54	009700284	Nipple, 1-1/4 Hex	2
55	008900629	Valve, 1-1/4 N.P.T. Gate	1
56	009700330	Bushing, 1 1/2 x 1 1/4 Reducer	1
57	009700295	Bushing, 1 x 1/2 Reducer	1
58	009700296	Bushing, 1 x 3/4 Reducer	2
59	008900506	Cross, 1	1
60	008900310	Nipple, 1 Close	2
61	008900628	Valve, 1 N.P.T. Gate	1

-Item Not Illustrated

De-Icer Pro DI-4000 Series SCS 440



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De-Icer Boom Cylinder Hydraulic Hose Installation
Figure 13

De-Icer Pro DI-4000 Series SCS 440



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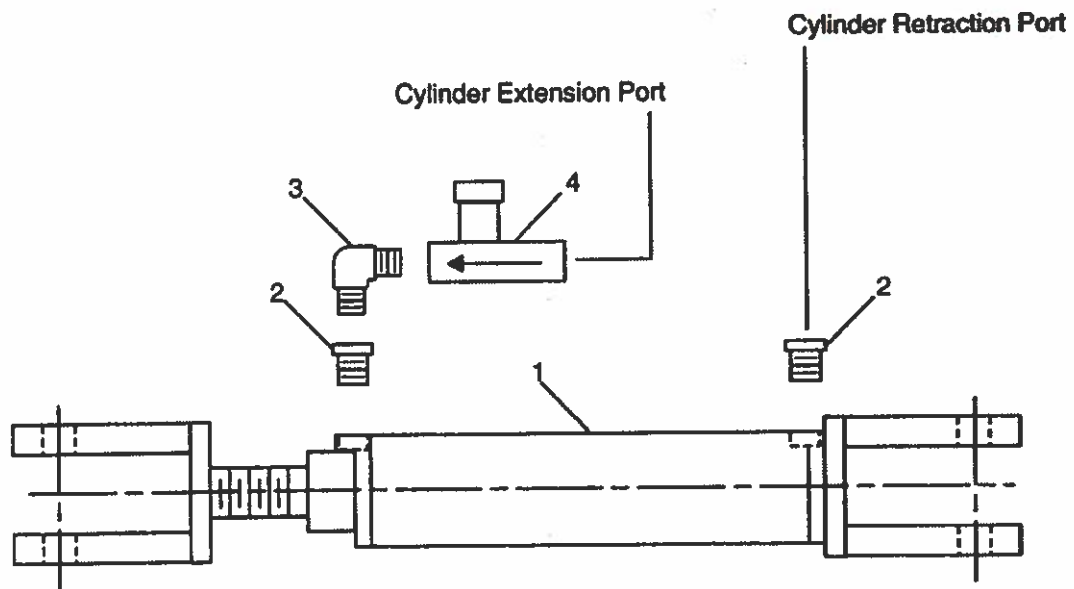
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
13-		De-Icer Boom Cylinder Hydraulic	1
-		Hose Installation	
1	007600153FT	Hose, Hydraulic 1/4 X	AR
2	007600153FT	Hose, Left Boom Lift 102 LG	1
3	007600153FT	Hose, Left Boom Lift 102 LG	1
4	007600153FT	Hose, Right Boom Lift 102 LG	1
-		Hose, Right Boom Lift 102 LG	1
5	007600153FT	Hose, Hydraulic 1/4 X	AR
6	007600153FT	Hose, Left Boom Swing 66 LG	1
7	007600153FT	Hose, Left Boom Swing 66 LG	1
8	007600153FT	Hose, Right Boom Swing 102 LG	1
-		Hose, Right Boom Swing 102 LG	1
9	007600153FT	Hose, Hydraulic 1/4 X	AR
10	007600153FT	Hose, Front Flusher 300 LG	1
11	007600153FT	Hose, Front Flusher 300 LG	1
-	009700411	Hose, Boom 240 LG	8
12	075500110	Union, 1/4 Bulkhead	8
13	075500109	Block, 5-Station Control Valve	1
14	075500117	Solenoid, Valve Spool	5
15	012602008	Valve, Pressure Relief	3
16	012602012	Cylinder, 8 Boom Lift UP & DOWN	2
17	012602012	Cylinder, 12 Boom Swing IN & OUT	2
		Cylinder, 12 Front Flusher	1

-Item Not Illustrated

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Boom Swing Cylinder Flow Control Installation
Figure 14

De-Icer Pro DI-4000 Series SCS 440



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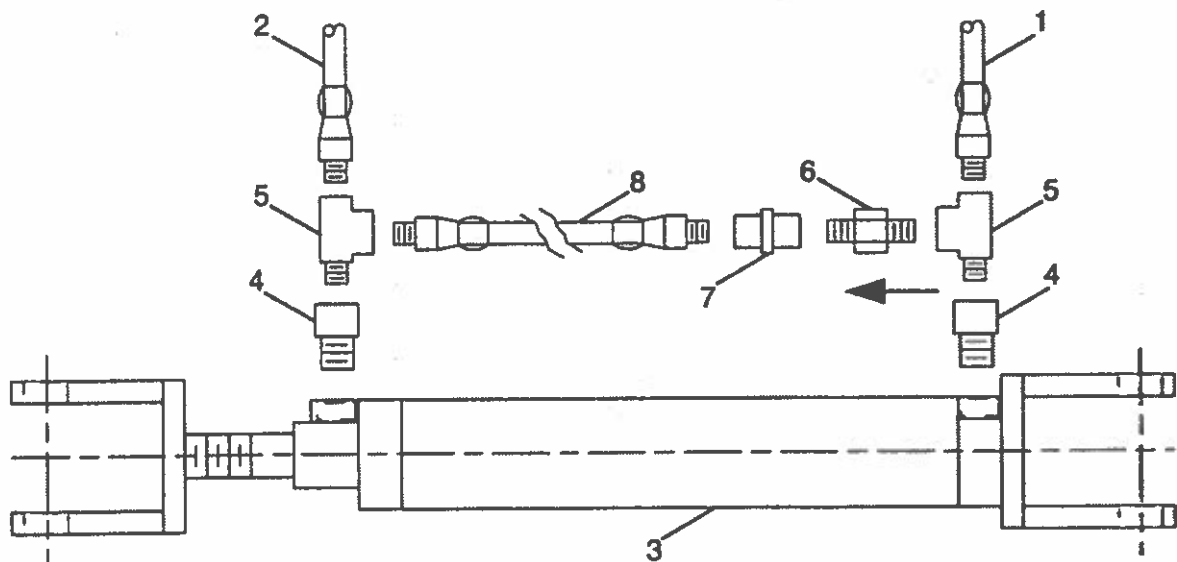
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
14-	055621040	Boom Swing Cylinder Flow Control Installation	1
1	012602012	Cylinder, 12 Boom Swing IN & OUT	2
2	009700287	Bushing, 3/8 X 1/4 NPT Reducer	2
3	009700221	Elbow, 90 degree 1/4 NPT	1
4	012300013	Valve, Flow Control 1/4 NPT	1

-Item Not Illustrated

De-Icer Pro DI-4000 Series SCS 440



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Boom Lift Cylinder Pressure Relief Installation
Figure 15

De-Icer Pro DI-4000 Series SCS 440



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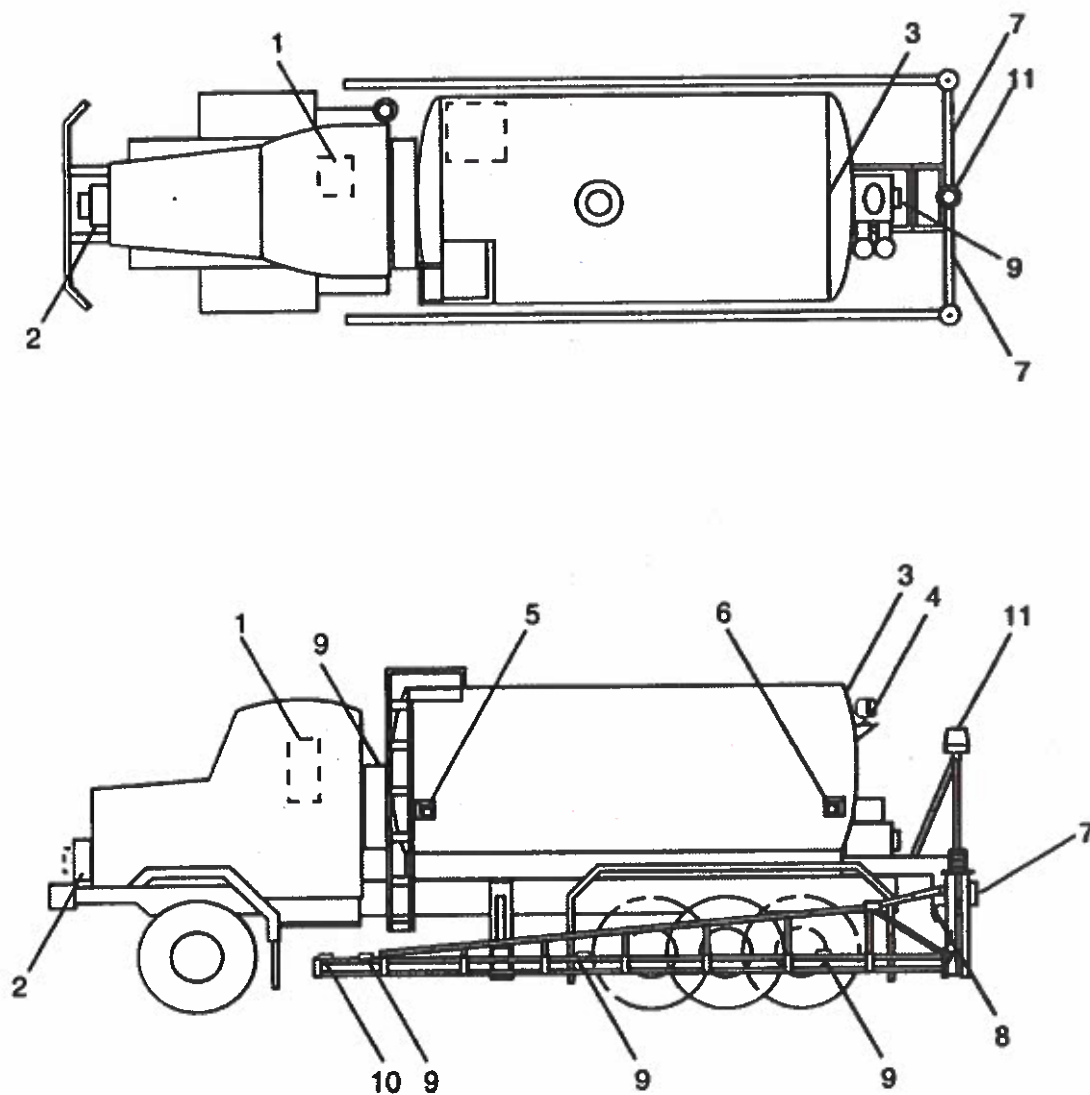
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
15-		Boom Lift Cylinder Pressure Relief Installation	1
1	007600153FT	Hose, Boom Lift	1
2	007600153FT	Hose, Boom Lift	1
3	012602008	Cylinder, 8 Boom Lift UP & DOWN	AR
4	009700287	Bushing, 3/8 X 1/4 NPT Reducer	2
5	009700245	Tee, 1/4 NPT Male Run	2
6	017400003	Valve, Pressure Relief	1
7	009700323	Coupler, 1/4 Female	1
8	007600153FT	Hose, 10 3/4 LG O.A.	AR

-Item Not Illustrated

De-Icer Pro DI-4000 Series SCS 440



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De-Icer Electrical Assembly
Figure 16

De-Icer Pro DI-4000 Series SCS 440



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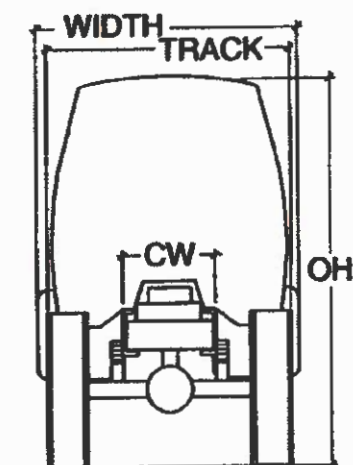
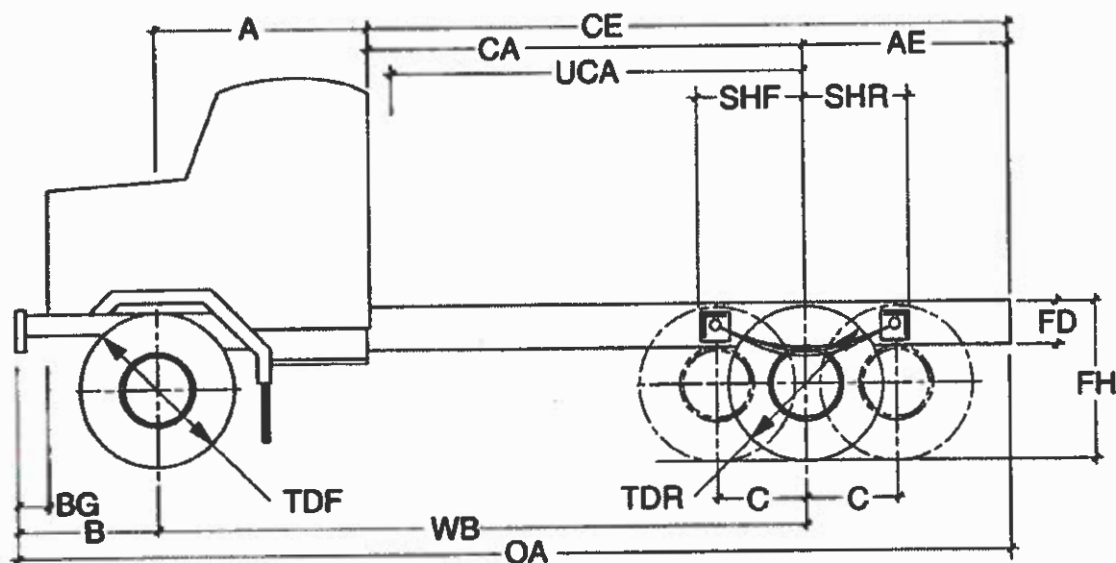
FIG/ ITEM NO	PRIMARY PART NO.	NOMENCLATURE	UNIT PER ASSY
16-		De-Icer Pro Electrical Assembly	1
1	025005078	Console, Batts Control	1
-	551840	Switch, SPST, 20Amp	4
-	B2803A1	Light, Red Warning 24V	1
-	S9980X	Lamp, Console	2
-	CB6377	Breaker, 15Amp Circuit	5
-	CB6321	Breaker 20Amp Circuit	1
-	003401001	Console	1
-			
-	004800101	Switch, SPDT, 20Amp Center Return	5
-	004800102	Switch, SPST, 20Amp Push Button	1
-	003410006	Sensor, Ground Speed	1
-	003410005	Transducer, Application Rate	1
2	017400002	Clutch, Electromagnetic 12 VDC 200 FT LB	1
3	5200C	Bar, Tank Three Light	1
4	004803501	Light, Tank Swivel Spot	2
5	B60A	Light, Tank Marker, Amber	2
6	B60R	Light, Tank Marker, Red	2
7	025002086	Box, Tail Light	2
-	008703502	Lens, Red, Tail Light	4
-	008703503	Lens, Clear, Back Up	2
8	004800003	Light, Boom Spot	2
9	004800004	Light, Red Rectangular Clearance	10
10	004800017	Light, Amber Rectangular Clearance (If Applicable)	2
-	004800021	Light, Red Oval Clearance, Fender (If Applicable)	AR
-	004800022	Light, Amber Oval Clearance, Fender (If Applicable)	AR
11	029700009	Light, Cab Safety Strobe	1
-	029700007	Mount, Safety Light Bar	1

-Item Not Illustrated

De-Icer Pro



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A Center front axle to back of cab.
 B Center front axle to front bumper.
 C Center tandem to axle.
 AE Center rear axle or tandem to end frame.
 BG Front Bumper to Grill.
 CA Cab to rear Axle or tandem.
 CE Cab to End of frame.
 CW Chassis frame Width.
 FD Frame Depth (Channel).
 FH Frame Height.
 OA Over All length.
 OH Overall Height.
 WB Wheel Base.
 SHF Spring Hanger Front to center of rear axle or tandem.
 SHR Spring Hanger Rear to center of rear axle or tandem.
 TDF Tire Diameter Front.
 TDR Tire Diameter Rear.
 UCA Usable Cab to Axle.
 TRACK Width of tire Track.
 WIDTH Overall Width of truck chassis.

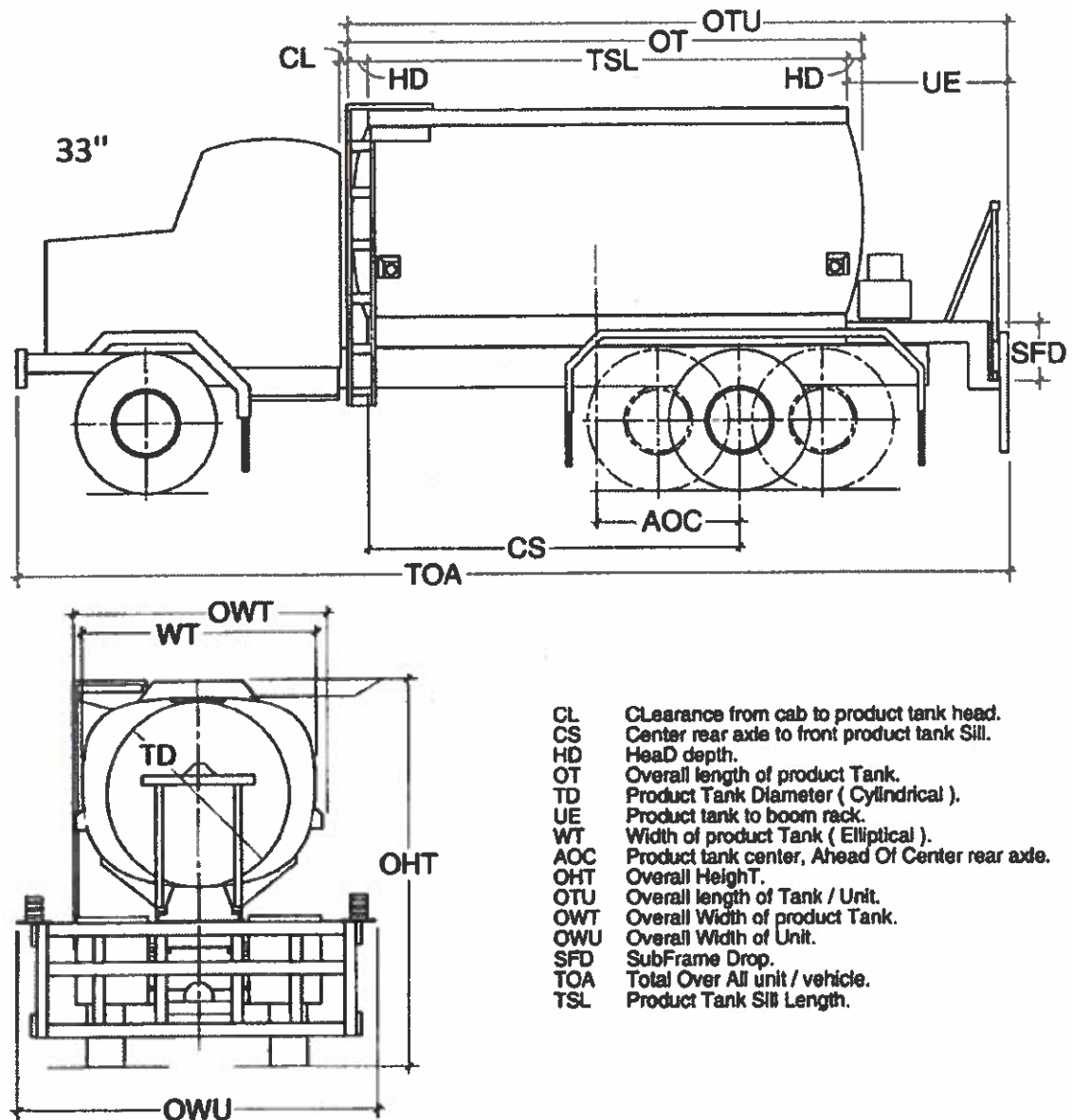
DIMENSIONS IN INCHES

A	B	C	AE	BG	CA
76"	51"	N/A	75"	23"	132"
CE	CW	FD	FH	OA	OH
206"	35"	3.5"	12"	28'8"	10'5"
WB	SHF	SHR	TDF	TDR	UCA
207"	30"	30"	22.5"	22.5"	89"
TRACK	WIDTH				
96"	10'8"				

De-Icer Pro



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CL Clearance from cab to product tank head.
 CS Center rear axle to front product tank sill.
 HD Head depth.
 OT Overall length of product Tank.
 TD Product Tank Diameter (Cylindrical).
 UE Product tank to boom rack.
 WT Width of product Tank (Elliptical).
 AOC Product tank center, Ahead Of Center rear axle.
 OHT Overall Height.
 OTU Overall length of Tank / Unit.
 OWT Overall Width of product Tank.
 OWU Overall Width of Unit.
 SFD SubFrame Drop.
 TOA Total Over All unit / vehicle.
 TSL Product Tank Sill Length.

DIMENSIONS IN INCHES

CL	CS	HD	OT	TD	UE
43"	83"	9"	192"	69"	49"
WT	AOC	OHT	OTU	OWT	OWU
N/A	16"	9'10"	204"	69"	10'8"
SFD	TOA	TSL			
N/A	31'3"	130"			

De-icer Pro DI-4000 Series SCS 440

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ESTIMATED WEIGHTS,

	FRONT	REAR	TOTAL
TRUCK	8,140 lb	4,700 lb	12,840 lb
EQUIPMENT	500 lb	5,160 lb	5,660 lb
Unit Complete	8,640 lb	9,860 lb	18,500 lb
Gross	11,140 lb	26,540	37,680 lb

WATER ONLY