



Electronic Service Manuals

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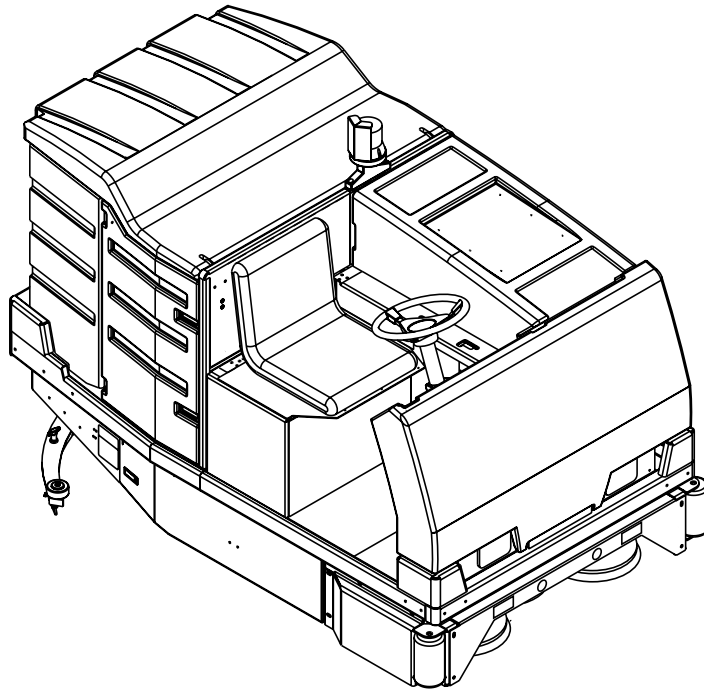
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Hydro-Retriever™ 2052

CR 1300



PARTS LIST

Advance MODELS 56459504(battery)
56459505(battery / Hydro-Max™ II)
Nilfisk MODELS 56459992(battery)
56459994(battery / Hydro-Max™ II)



Nilfisk
Advance

setting standards

4/99 revised 5/04 FORM NO. 56042350
BOOK E SECTION 9.9.1

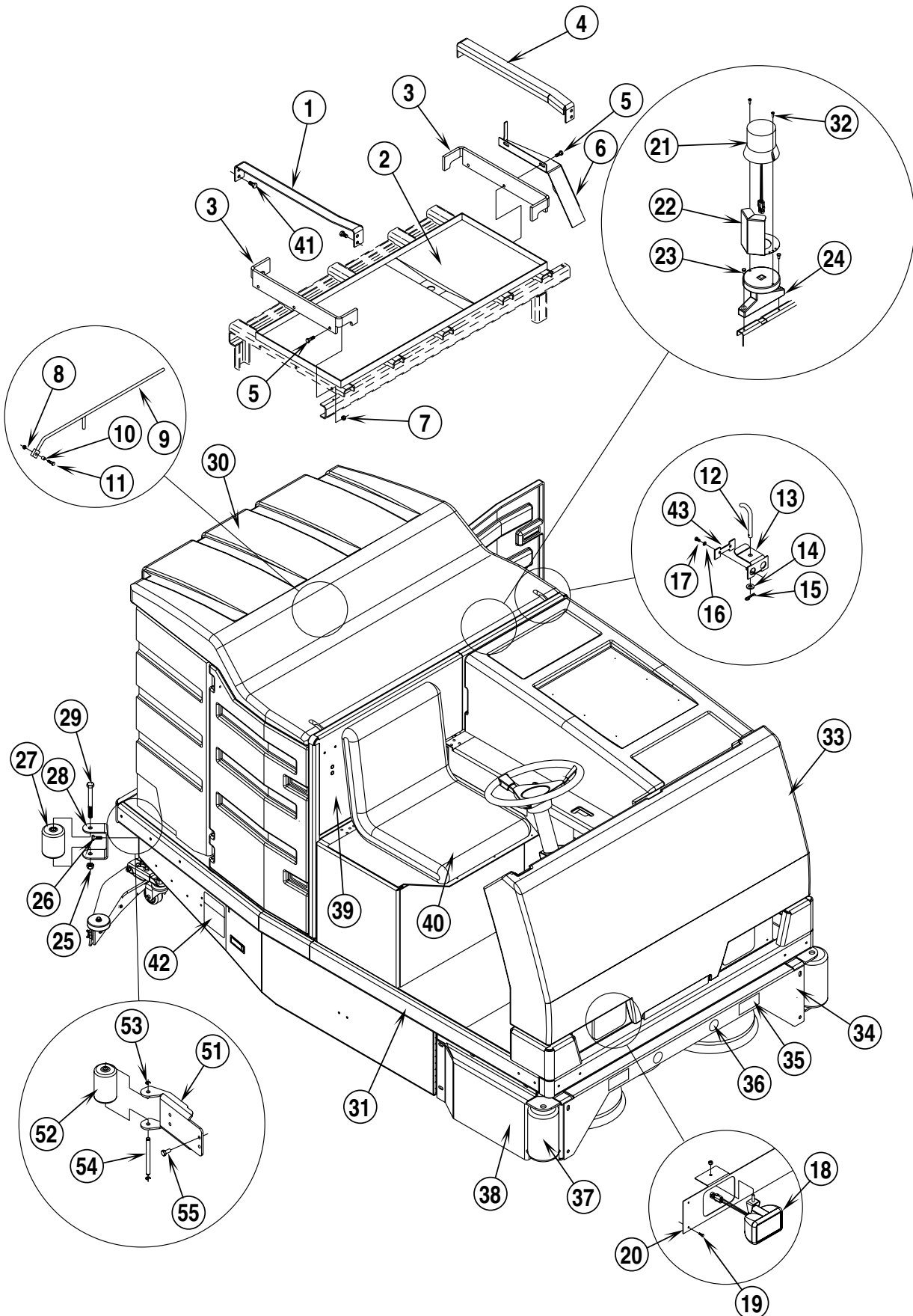
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WHEN ORDERING PARTS

- * Use the 8 digit numbers from the "Ref. No." columns in this parts list.
- * Specify the model and serial number of the machine.
- * Use the space below to record the model and serial number for future reference.

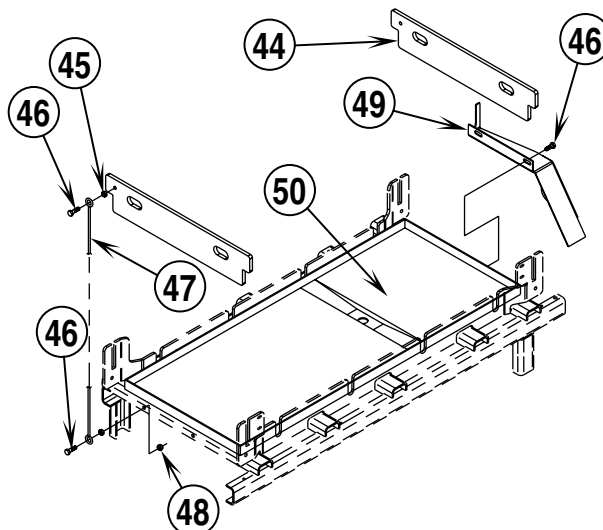
Model _____ Serial No. _____



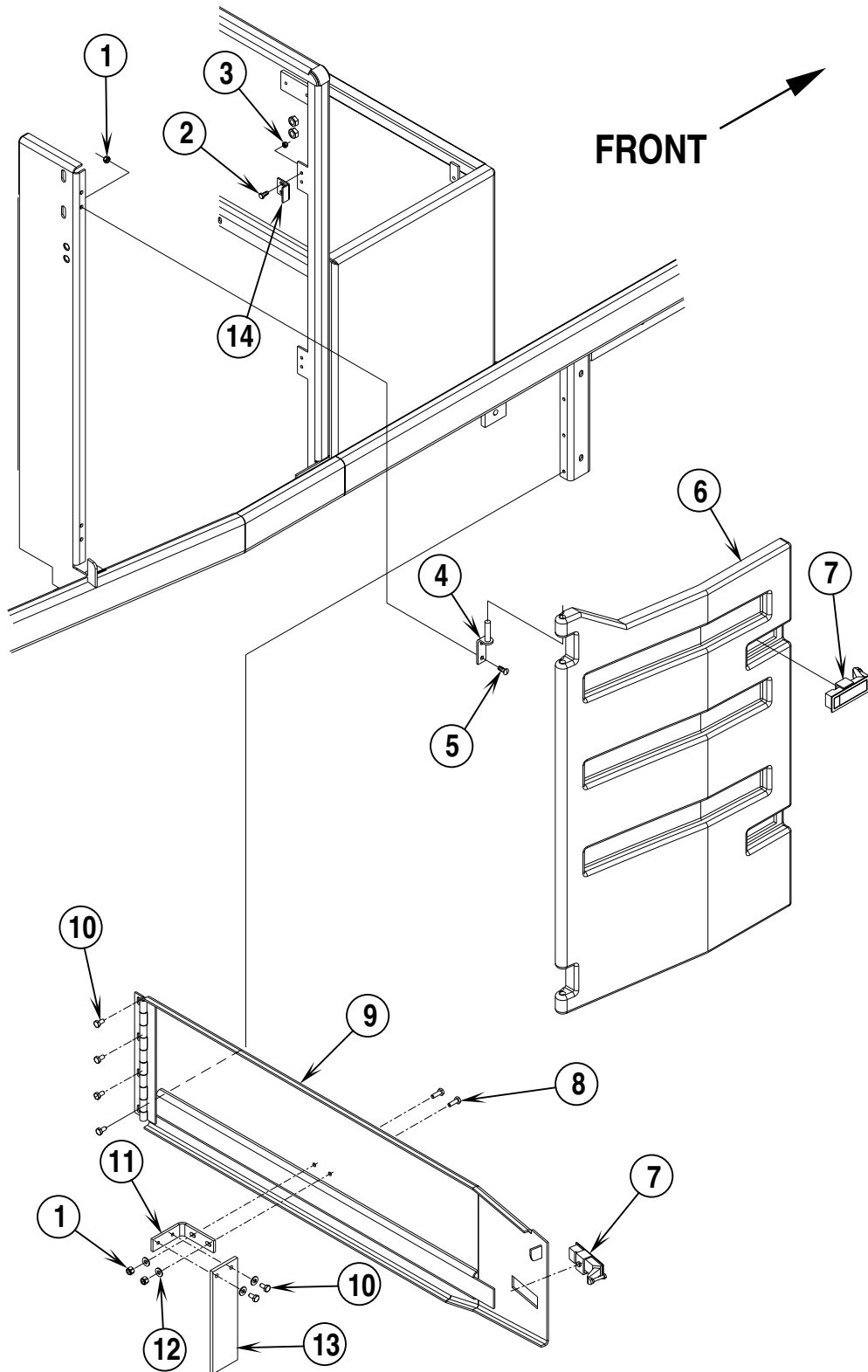
99-4	OUTER BODY-1	BOOK E		
03-9	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	3

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
1	56459772	1	Strut, Right (2052 before SN1297858)	39	56459675	1	Center Panel Weldment (before SN1297858)
2	56454401	1	Tray, Battery	*	56002256	4	Scr, Hex Type 1 3/8-16 x 1.00
3	56459752	2	Retainer, Battery (2052 before SN1297858)	*	56002063	4	Wsh, Flt SAE 3/8
4	56459771	1	Strut, Left (2052 before SN1297858)	*	56001862	2	Scr, Hex Hd 5/16-18 x .50
5	56002667	6	Scr, Hex Hd 5/16-18 x .75	*	56002701	2	Nut, Hex Nyl 5/16-18
6	56459820	1	Guard, Belt	40	56481346	1	Seat, Super
7	56002701	6	Nut, Hex Nyl Loc 5/16-18	41	56002208	8	Scr, Hex Hd 3/8-16 x .50
8	56002708	1	Nut, Hex Nyl Loc 1/4-20	42	56015425	2	Decal, Warning Broom
9	56459770	1	Prop-Rod Weldment	*	56014825	1	Decal, Battery
10	56321532	1	Bushing, .25 x .37 x .40	43	56459990	2	Plate, Fastener
11	56002093	1	Scr, Hex Hd 1/4-20 x 1.00	44	56459907	2	Retainer, Battery (2052 after SN1297857 / all CR1300)
12	56459699	2	Hinge	45	56009086	2	Nut, Hex Jam 5/16-18 (2052 after SN1297857 / all CR1300)
13	56459991	2	Retainer, Hinge	46	56002667	4	Scr, Hex Hd 5/16-18 x .75 (2052 after SN1297857 / all CR1300)
14	56001879	2	Wsh, Flt SAE 1/2	47	56452259	2	Cable (2052 after SN1297857 / all CR1300)
15	56002959	2	Pin, Cot Hair SS .12 x .50	48	56002701	2	Nut, Hex Nyl Loc 5/16-18 (2052 after SN1297857 / all CR1300)
16	56002098	4	Wsh, Flt SAE 1/4	49	56459820	1	Guard, Belt (2052 after SN1297857 / all CR1300)
17	56001854	3	Scr, Hex Hd 1/4-20 x .50	50	56454401	1	Tray, Battery (2052 after SN1297857 / all CR1300)
18	56416168	2	Headlight		56456379	2	Rear Roller Kit (#51-55 / after Aug. 2000)
	56482642	1	Replacement Bulb (for 56416168)	51	56455991	2	Mount, Rear Roller (after Aug. 2000)
19	56009012	6	Scr, Hex Thd Form 10-24 x .38	52	56392102	2	Roller (after Aug. 2000)
20	56459764	1	Mounting, Headlight	53	56003264	4	Ring, Ret Type E .50 (after Aug. 2000)
21	56416433	1	Strobe	54	56455995	2	Axle, Roller (after Aug. 2000)
*	56416435	1	Lens, Amber (for 56416433)	55	56002256	4	Scr, Hex Type F 3/8-16 x 1.00 (after Aug. 2000)
*	56416436	1	Flash Tube (for 56416433)		56016371	1	Decal, Battery
22	56416589	1	Bracket, Beacon	**	56459754	1	Overhead Guard Assembly
23	56009033	2	Scr, Hex Thd Form 1/4-20 x .50	**	56376501	1	Bumper Assembly Kit
24	56459896	1	Light, Riser	**	56459909	1	Battery Slide Out Kit (2052 from SN1297857 to SN1659222) (all CR1300 up to SN1677159)
	56454003	2	Roller Kit (#25, 27-29 / before Sept. 2000)	**	56460088	1	Battery Roll Out Kit (2052 after SN1659222) (CR 1300 after SN1677159)
25	56002770	2	Nut, Hex Nyl Loc 1/2-13 (before Sept. 2000)	**	56459953	1	Backup Alarm Kit
26	56002663	4	Scr, Hex Hd 3/8-16 x 1.00 (before Sept. 2000)	**	56456186	1	Hose & Wand Kit
*	56002769	4	Nut, Hex Nyl Loc 3/8-16 (before Sept. 2000)	**	56419369	1	Seat Belt Kit
27	56407006	2	Wheel, Roller (before Sept. 2000)				
28	56454265	2	Mount, Roller (before Sept. 2000)				
29	56002720	2	Scr, Hex Hd 1/2-13 x 5.00 (before Sept. 2000)				
30	56459686	1	Cover				
*	56459838	1	Gasket				
31	56459600	1	Chassis Weld't (before Sept. 2000)				
	56460058	1	Chassis Weld't (after Aug. 2000)				
32	56002124	2	Scr, Pan Phil 10-24 x .62				
33	56459749	1	Fascia, Front (2052)				
	56459935	1	Fascia, Front (CR 1300)				
*	56001862	3	Scr, Hex Hd 5/16-18 x .50				
34	56454691	1	Plate				
*	56002208	5	Scr, Hex Hd 3/8-16 x .50				
*	56002663	4	Scr, Hex Hd 3/8-16 x 1.00				
*	56002769	4	Nut, Hex Nyl Loc 3/8-16				
*	56002063	4	Wsh, Flt SAE 3/8				
35	56025336	2	Decal, Flow Control				
36	56030080	2	Decal, Hands Clear				
37	56409335	2	Bumper, Roller				
*	56409336	2	Pin				
*	56003266	4	Ring, Ret Ext Type E				
38	56454926	1	Panel Weldment, Right				
*	56002256	5	Scr, Hex Type 1 3/8-16 x 1.00				
*	56002769	2	Nut, Hex Nyl Loc 3/8-16				
*	56454927	1	Panel Weldment, Left				
*	56002256	5	Scr, Hex Type 1 3/8-16 x 1.00				
*	56002769	2	Nut, Hex Nyl Loc 3/8-16				

* = Not Shown
** = Optional



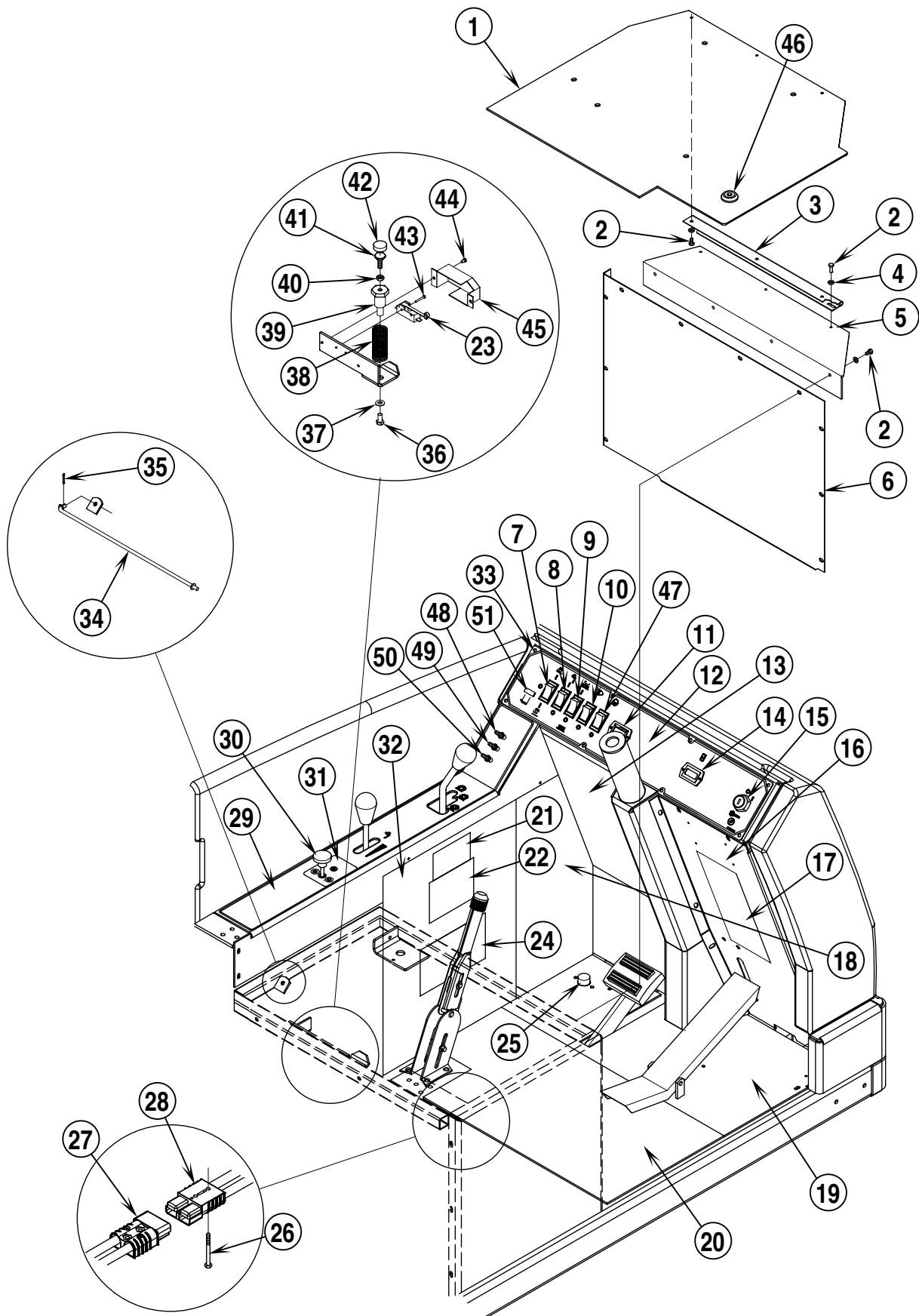
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E	9.9.1	4	Hydro-Retriever™ 2052B / CR 1300B	01-1



99-4	OUTER BODY-2 Hydro-Retriever™ 2052B / CR 1300B	BOOK E		
01-1		E	9.9.1	5

Item	Ref. No.	Qty	Description
1	56002708	12	Nut, Hex Nyl Loc 1/4-20
2	56002503	8	Scr, Hex Hd 10-24 x .50
3	56002768	8	Nut, Hex Nyl Loc 10-24
4	56459776	4	Hinge Pin Weldment
5	56002755	8	Scr, Flt Phil 1/4-20 x .50
6	56459756	1	Door, Right
*	56459755	1	Door, Left
	56459748	1	Right Broom Door Assembly (#1, 7-13)
	56459747	1	Left Broom Door Assembly (#1, 7-13)
7	56418471	6	Latch
8	56002155	4	Scr, Hex Hd 1/4-20 x .75
9	56459746	1	Right Door Weldment
*	56459745	1	Left Door Weldment
10	56009033	12	Scr, Hex Thd Form 1/4-20 x .50
11	56459741	1	Mount, Right Splash Guard
*	56459738	1	Mount, Left Splash Guard
12	56002098	8	Wsh, Flt SAE 1/4
13	56459742	1	Guard, Right Splash
*	56459739	1	Guard, Left Splash
14	56455105	4	Strike, Latch

* = Not Shown



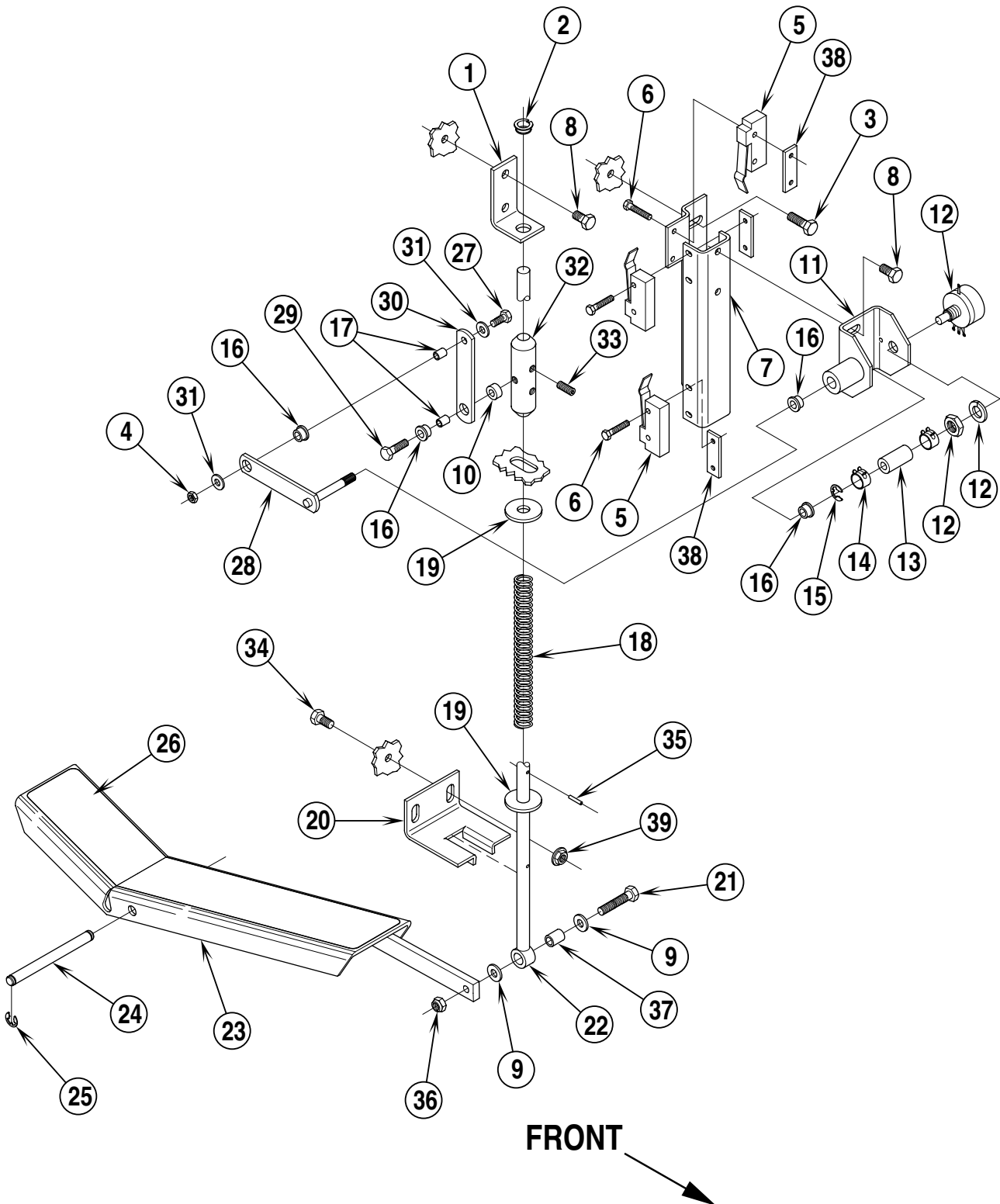
99-4	OPERATOR'S COMPARTMENT	BOOK E		
01-5	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	7

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
1	56459743	1	Plate, Seat (CR1300 before SN1483014) (2052 before SN1489196)	24	56014517	1	Decal, Important
	56463852	1	Plate, Seat (CR1300 after SN1483013) (2052 after SN1489195)	25	56441555	1	Switch, Horn (S9)
2	56009039	16	Scr, Hex Thd Form 10-24 x .50	26	56001874	2	Scr, Hex Hd 1/4-20 x 2.00
3	56457378	1	Hinge (CR1300 before SN1483014) (2052 before SN1489196)	27	56452271	1	Connector Assembly
	56463853	1	Hinge (CR1300 after SN1483013) (2052 after SN1489195)	28	56457809	1	Connector Assembly, Dual
4	56001954	16	Wsh, Flt SAE #10	29	56016239	1	Decal, Control Panel
5	56452197	1	Angle (CR1300 before SN1483014) (2052 before SN1489196)	30	56459842	1	Disconnect Assembly
	56463851	1	Angle (CR1300 after SN1483013) (2052 after SN1489195)	31	56014881	1	Decal, Emergency
6	56459744	1	Panel	32	56455021	1	Panel
7	56261245	1	Switch, Squeegee (S6)	*	56009039	7	Scr, Hex Thd Form 10-24 x .50
8	56262551	1	Switch, Solution Solenoid (S19)	*	56001954	7	Wsh, Flt SAE #10
9	56377003	1	Switch, Scrub Brush (S7)	33	56459623	1	Panel, Control
10	56262551	1	Switch, Headlight (S5)	34	56457365	1	Rod Weldment (seat prop rod)
11	56416395	1	Fuel Gauge, Battery (P2)	35	56002166	1	Pin, Cot .09 x .75
*	56392845	1	Gasket	36	56002929	1	Scr, Hex Hd Loc 5/16-18 x .62 (2052 before SN1297858)
*	56001830	2	Scr, Pan Phil 6-32 x .50	37	56009057	1	Wsh, Flt Hard .34 x 1.00 x .12 (2052 before SN1297858)
*	56009056	2	Wsh, Int Shprf #6	38	56491206	1	Spring, Compression (2052 before SN1297858)
*	56009008	2	Nut, Hex Machine 6-32	39	56491204	1	Pin (2052 before SN1297858)
12	56016238	1	Decal, Control Panel	40	56009086	1	Nut, Hex Jam 5/16-18 (2052 before SN1297858)
13	56452146	1	Panel	41	56401783	1	Leveler (2052 before SN1297858)
*	56009039	4	Scr, Hex Thd Form 10-24 x .50	42	56401788	1	Cap, Snap on 3/4 Hex (2052 before SN1297858)
*	56001954	4	Wsh, Flt SAE #10	43	56002582	2	Scr, Hex Hd 6-32 x .88 (2052 before SN1297858)
14	56393718	1	Hourmeter (P1)	44	56003280	2	Scr, Hex Hd 8-32 x .25 (2052 before SN1297858)
*	56392845	1	Gasket	45	56457374	1	Cover (2052 before SN1297858)
*	56001830	2	Scr, Pan Phil 6-32 x .50	46	56455982	1	Latch (2052 after SN1297857 / all CR1300)
*	56009056	2	Wsh, Int Shprf #6	*	56459952	1	Spacer, Latch (2052 after SN1297857 / all CR1300)
*	56009008	2	Nut, Hex Machine 6-32	47	56262551	1	Switch, Recycle Pump (S8 / Hydro-Max™II)
15	56393325	1	Bracket, Keylock	48	56755164	1	Metering Barb NOTE (stamped D / Hydro-Max™II)
*	56393415	A/R	Replacement Key	49	56755246	1	Metering Barb NOTE (stamped F / Hydro-Max™II)
*	56301636	1	Switch, Toggle (Main Power / S4)	50	56755594	1	Metering Barb NOTE (stamped 2 / Hydro-Max™II)
16	56459831	1	Panel, Right	51	56452260	1	Detergent Tank Empty Light (H2) (Hydro-Max™II)
*	56009039	6	Scr, Hex Thd Form 1/4-20 x .50				
*	56001954	6	Wsh, Flt SAE #10				
17	56014601	1	Decal, Caution				
18	56455022	1	Panel				
*	56009039	5	Scr, Hex Thd Form 10-24 x .50				
*	56001954	5	Wsh, Flt SAE #10				
19	56459783	1	Floor Plate Weldment				
*	56009039	3	Scr, Hex Thd Form 10-24 x .38				
*	56001954	3	Wsh, Flt SAE #10				
*	56452151	1	Floor Mat				
20	56452147	1	Panel, Floor				
*	56009039	8	Scr, Hex Thd Form 10-24 x .50				
*	56001954	8	Wsh, Flt SAE #10				
*	56452148	1	Floor Mat				
21	56016240	1	Decal, Wear Items 2052B				
	56016642	1	Decal, Wear Items CR 1300B				
22	56015427	1	Decal, Warning Tip Over				
23	56457364	1	Switch, Seat (S13) (2052 before SN1297858)				

* = Not Shown

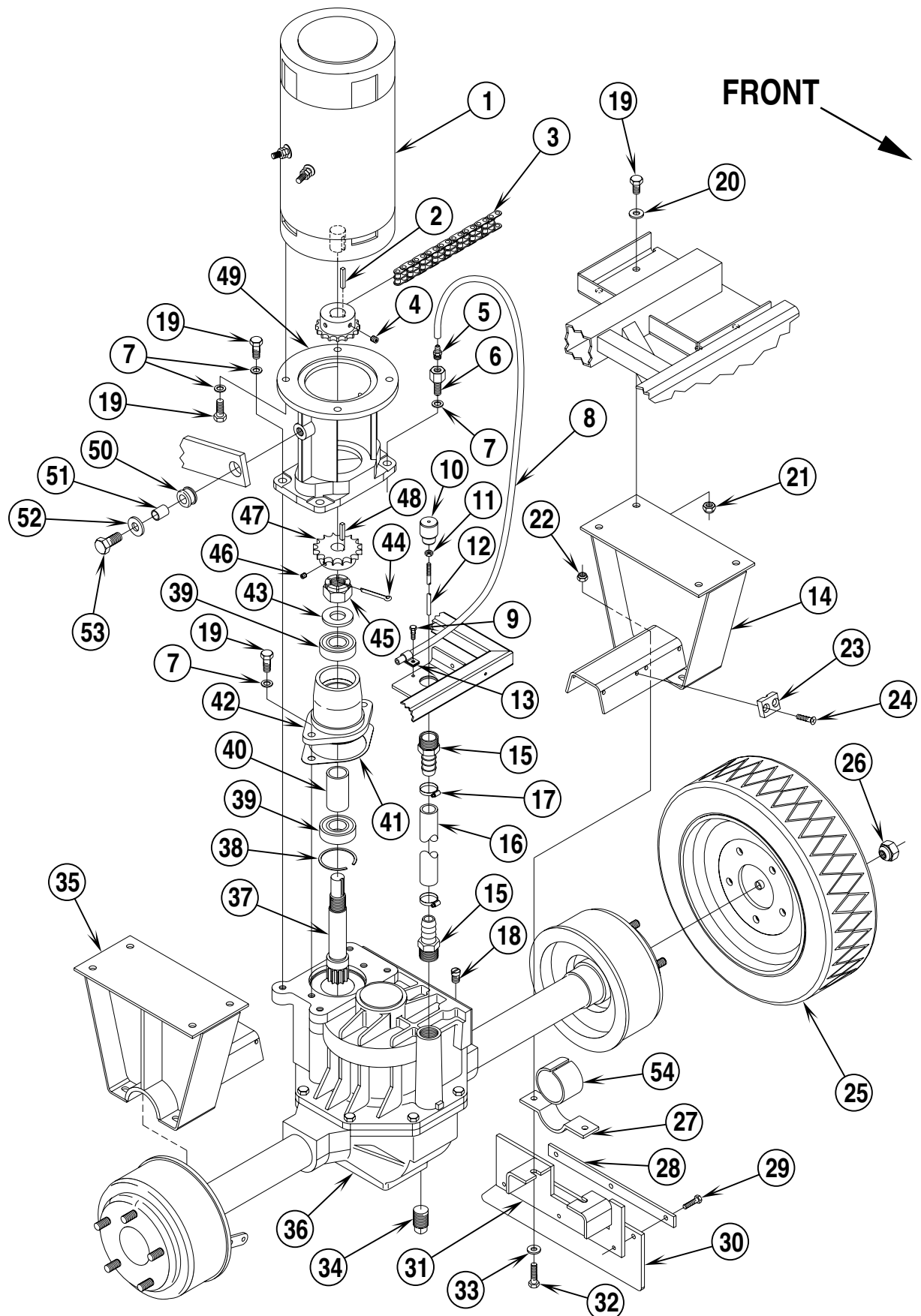
NOTE: Refer to decal PN56025590 for explanation of codes; "D", "F" and "2".

BOOK E			DRIVE PEDAL	99-4
E	9.9.1	8	Hydro-Retriever™ 2052B / CR 1300B	01-1



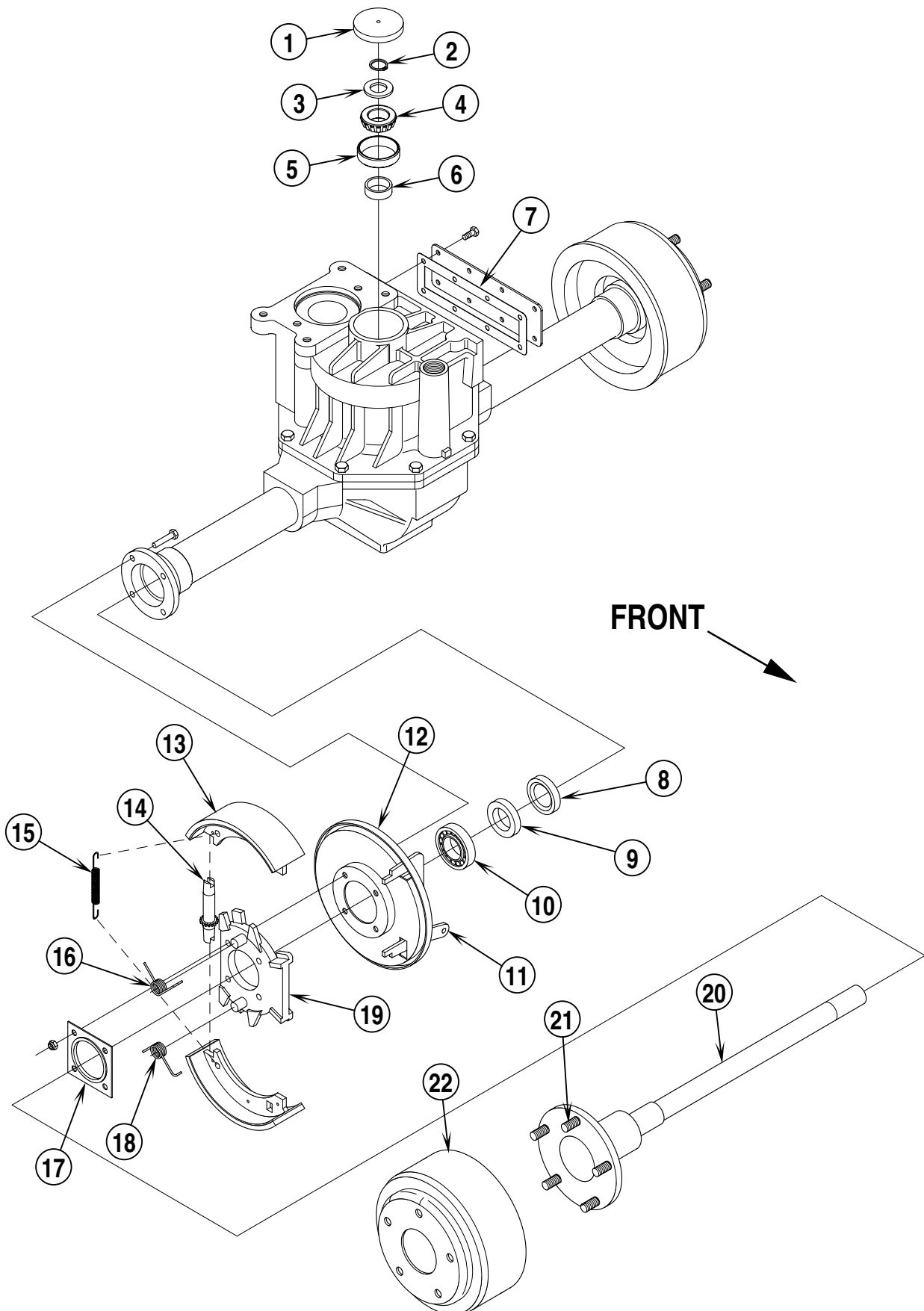
99-4	DRIVE PEDAL	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	9

Item	Ref. No.	Qty	Description
1	56452154	1	Angle
2	56329098	1	Bearing
3	56009033	2	Scr, Hex Thd Form 1/4-20 X .50
4	56002605	1	Nut, Hex Flex Loc 10-24
5	56452144	3	Switch
6	56002582	6	Scr, Hex 6-32 X .88
7	56452168	1	Mount
8	56009019	4	Scr, Hex Thd Form 1/4-20 X .38
9	56002098	2	Wsh, Flt SAE 1/4
10	56380648	1	Wsh Flt Steel .219
	56452172	1	Potentiometer Assembly (#11-16,27)
11	56452161	1	Bracket
12	56452142	1	Potentiometer
		1	3/8 Shakeproof Wsh
		1	3/8-32 Nut
13	56454036	1	Coupler
14	56452252	2	Clamp, Spring
15	56003268	1	Retaining Ring
16	56756318	4	Flanged Bearing
17	56369004	2	Bushing
18	56452141	1	Spring Compression
19	56452145	2	Wsh, Flt Brass
20	56452167	1	Bracket
21	56001878	1	Scr, Hex 1/4-20 X 1.25
22	56452164	1	Shaft
23	56452174	1	Pedal
24	56454010	1	Pin
25	56003261	2	Retaining Ring
26	56452170	1	Pedal Mat
27	56002503	1	Scr, Hex 10-24 X .50
28	56452157	1	Linkage
29	56002504	1	Scr, Hex 10-24 X .75
30	56452158	1	Strap
31	56001954	2	Wsh, Flt SAE #10
32	56452153	1	Collar
33	56002978	2	Scr, Soc Set Loc 10-24 X .50
34	56002801	2	Scr, Hex SS 1/4-20 X .50
35	56003132	2	Pin, Spr .09 X .50
36	56002840	1	Nut, Hex Nyl Loc 1/4-20
37	56475411	1	Bushing .25 X .37 X .48
38	56376015	3	Nut Plate
39	56001827	2	Nut, Hex Serrated 1/4-20



99-4	TRANSAXLE	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	11

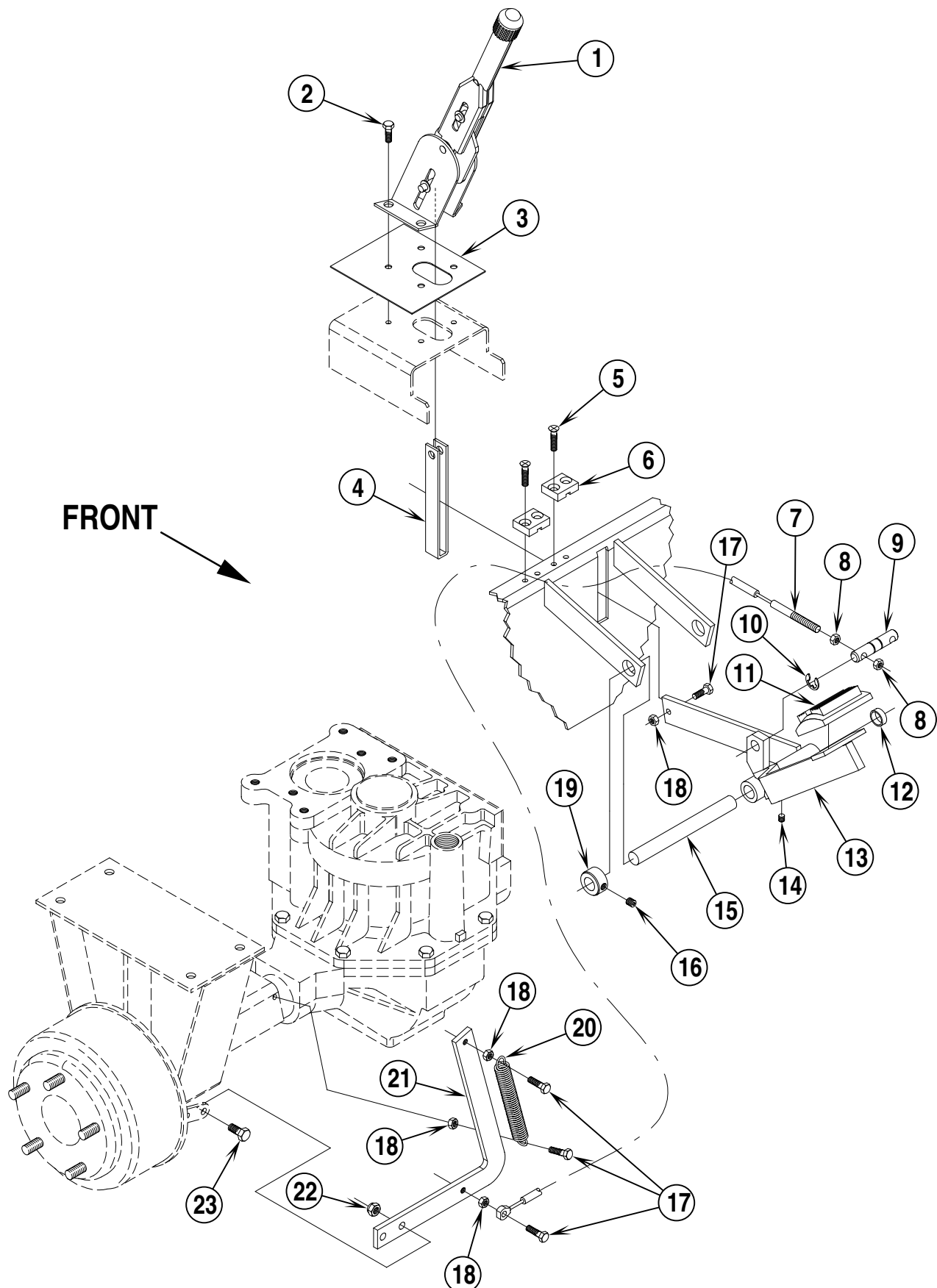
Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
1	56454484	1	Drive Motor	29	56009018	6	Scr, Hex Thd Form 1/4-20 X .75
*	56454485	1	Carbon Brush (set of 8)	30	56459351	2	Blade
2	56003241	1	Key, Sq. .19 X 1.31	31	56459356	1	Left Bracket
3	56480820	1	Chain Coupler	*	56459355	1	Right Bracket
4	56009131	2	Scr, Soc Set Loc 5/16-18 X .31	32	56001834	4	Scr, Hex 5/16-18 X 1.25
5	56477522	1	Barb3/16 X 1/8 Brass	33	56002220	4	Wsh, Flt Std 5/16
6	56453487	1	Scr, 3/8-16 X 1.00	34	56113182	1	1/2 Pipe Plug
7	56002055	10	Wsh, Flt Std 3/8	35	56453435	1	Right Bracket
8	56492744	1	Tube	36	56453413	1	Hydrostatic Axle
9	56009039	1	Scr, Hex Thd Form 10-24 X .50	37	56453406	1	Shaft
10	56453483	1	Knob	38	56378399	1	Retaining Ring Int.
11	56009087	1	Nut, Hex Jam 1/4-20	39	56479430	2	Ball Bearing
12	56453478	1	Rod	40	56453423	1	Spacer
13	56342319	1	Tube Clamp	41	56453419	1	Gasket
14	56453430	1	Left Bracket	42	56453401	1	Shaft Housing
15	56456801	2	Adapter, Barb	43	56002228	1	Wsh Flt SAE 7/8
16	56453475	1	Tube	44	56002338	1	Pin Cot .19 X 2.00
17	56112771	2	Hose Clamp	45	56110817	1	Castle Nut
18	56106046	1	1/8 Pipe Plug	46	56001841	2	Scr, Soc Set Loc 1/4-20 X .25
19	56002947	17	Scr, Hex Loc 3/8-16 X 1.00	47	56453409	1	Sprocket
20	56002910	8	Wsh, Flt SAE SS 3/8	48	56740168	1	Key Sq. .19 X 1.07
21	56002769	8	Nut, Hex Nyl Loc 3/8-16	49	56454490	1	Motor Adapter
22	56002701	4	Nut, Hex Nyl Loc5/16-18	50	56453254	2	Grommet
23	56477884	4	Cable Clamp	51	56367486	2	Bushing .50 X .62 X .78
24	56001832	8	Scr, Flt Phil 1/4-20 X 1.00	52	56009017	2	Wsh, Flt Harden .516 X .938 X .075
25	56452201	2	Wheel Assembly, includes:	53	56001968	2	Scr, Hex 1/2-13 X 1.50
	56452200	2	Tire	54	56453258	2	Strip, Isolator
	56452199	2	Hub				
26	56453469	10	Lug Nut	* = Not Shown			
27	56453472	2	Strap				
28	56459352	2	Strap				



99-4	DIFFERENTIAL AND BRAKES Hydro-Retriever™ 2052B / CR 1300B	BOOK E		
01-1		E	9.9.1	13

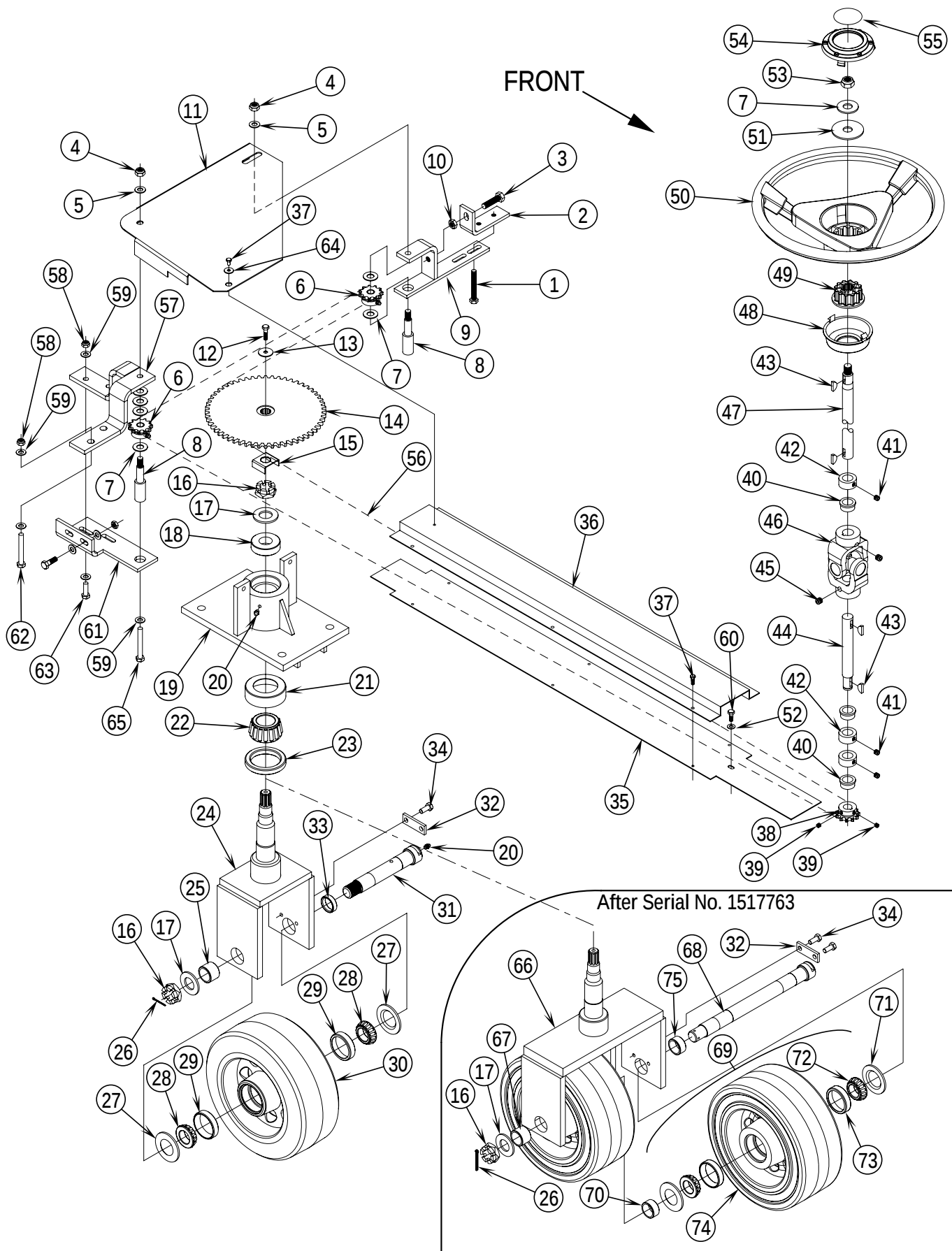
Item	Ref. No.	Qty	Description
1	56455151	1	Expansion Plug
2	56455150	1	Snap Ring
3	56455149	1	Shim
4	56455148	1	Bearing
5	56455147	1	Bearing Race
6	56455146	1	Spacer
7	56455153	1	Gasket
8	56455161	2	Oil Seal
9	56455159	2	Wheel Bearing Retaining Ring
10	56455158	2	Bearing
11	56453425	2	Lever
*	56453429	2	Pin
*	56453427	2	Retainer
12	56453440	2	Dust Shield NOTE
13	56453421	4	Brake Shoe
14	56453415	2	Adjuster
15	56453439	2	Spring
16	56453433	2	Spring (Green)
17	56455157	2	Wiper Seal
18	56453437	2	Spring (Red)
19	56503022	2	Brake Mount Casting NOTE
20	56455156	2	Axle Shaft
21	56455155	10	Wheel Bolt
22	56453414	2	Brake Drum

NOTE: Re-assemble using a 1/16" (1.5 mm) bead of silicone sealant.



99-4	BRAKE PEDAL AND LEVER	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	15

Item	Ref. No.	Qty	Description
1	56448200	1	Brake Lever
2	56009033	4	Scr, Hex Thd Form 1/4-20 X .50
3	56454956	1	Floor Mat
4	56453964	1	Strap
5	56001832	4	Scr, Flt Phil 1/4-20 X 1.00
6	56477884	2	Cable Clamp
7	56468460	2	Cable
8	56009086	4	Nut, Hex Jam 5/16-18
9	56453966	1	Pin
10	56003264	2	Ring Ret Ext Type E
11	56365002	1	Pad, Rubber
12	56478781	2	Bearing
13	56453950	1	Lever
14	56001841	1	Scr, Soc Set Loc 1/4-20 X .25
15	56453958	1	Rod
16	56009131	2	Scr, Soc Set Loc 5/16-18 X .31
17	56002155	7	Scr, Hex 1/4-20 X .75
18	56009086	7	Nut, Hex Jam 5/16-18
19	56367354	2	Collar
20	56448112	2	Spring
21	56453460	2	Lever
22	56002701	4	Nut, Hex Nyl Loc 5/16-18
23	56002221	4	Scr, Hex 5/16-18 X 1.00

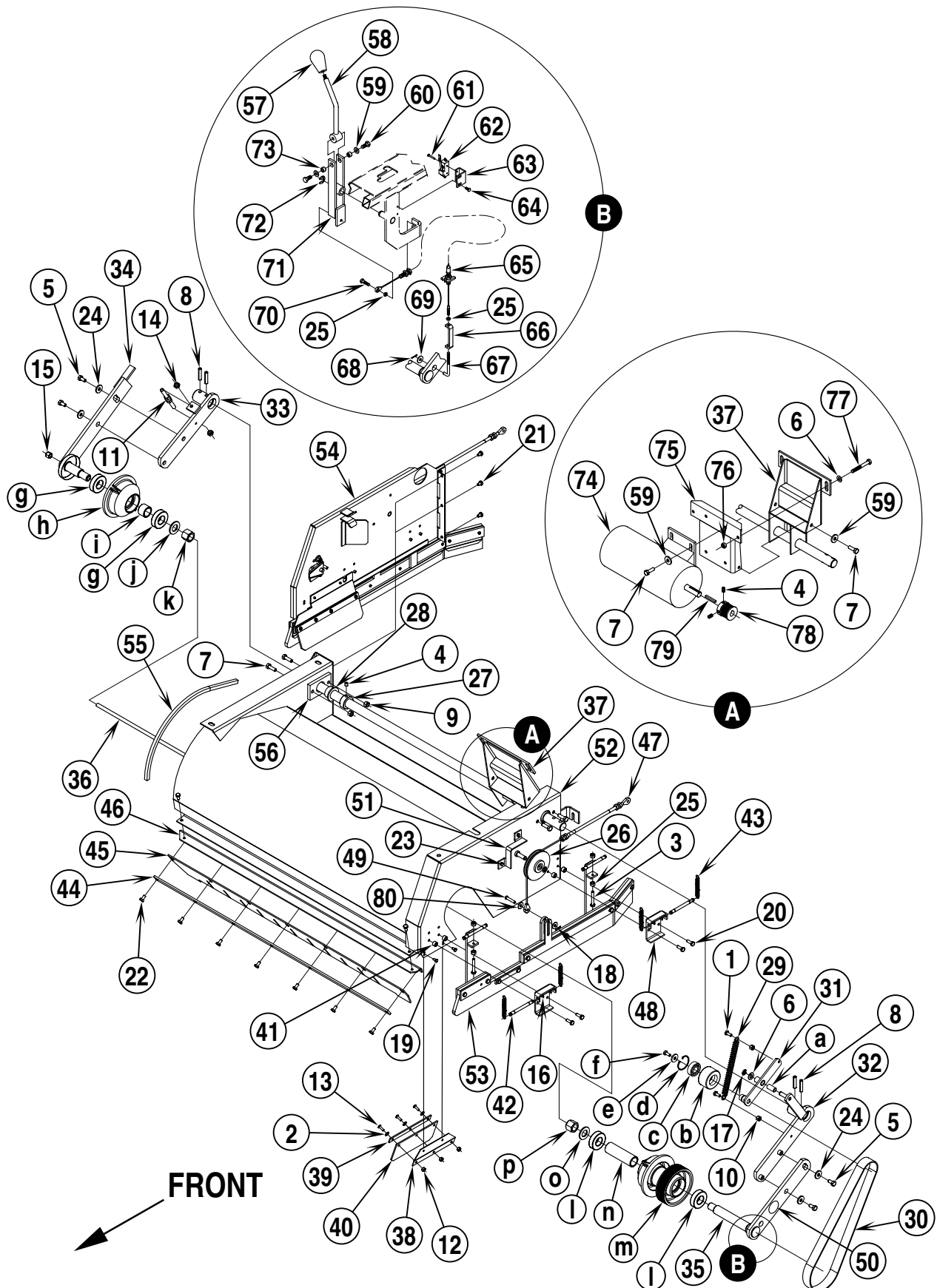


99-4	STEERING & SPINDLE ASSEMBLY		BOOK E		
03-12	Hydro-Retriever™ 2052B / CR 1300B		E	9.9.1	17

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
	56454108	1	Steering Idler Assy (#1-10)	30	56459626	1	Wheel 10 x 5 (before SN1517764)
1	56002154	2	Scr, Hex Thd To Hd 5/16-18 x 2.75	31	56455535	1	Axle (before SN1517764)
2	56454118	1	Angle	32	56453562	1	Retainer
3	56002747	1	Scr, Hex Thd To Hd 3/8-16 x 1.50	33	56448167	1	Bushing
4	56002841	1	Nut, Hex Nyl Loc-Thin 3/8-16	34	56002956	2	Scr, Hex Hd Loc 5/16-18 x .75
5	56002055	1	Wsh, Flt STD 3/8	35	56454103	1	Panel
6	56454079	2	Sprocket Assembly	36	56454106	1	Channel
*	56454078	2	Sprocket	37	56009012	7	Scr, Hex Thd Form 10-24 x .38
*	56366633	4	Bearing, Sleeve	38	56454098	1	Sprocket
*	56101737	2	Fitting, Lube 1/4-23	39	56002930	2	Scr, Soc Set Loc 1/4-20 x .38
7	56002168	7	Wsh, Flt STD 1/2	40	56250414	3	Bearing, Flange
8	56454109	1	Pin	41	56002086	3	Scr, Soc Set Loc 5/16-18 x .25
9	56454121	1	Bracket Weld't.	42	56367095	3	Collar, Shaft
10	56009085	1	Nut, Hex Jam 3/8-16	43	56003228	4	Key, WDF #606
11	56459693	1	Guard	44	56454096	1	Shaft
12	56001821	1	Scr, Hex Hd 1/4-20 x .88	45	56003081	2	Scr, Soc Set Loc 3/8-16 x .38
13	56009002	1	Wsh, Flt .26 x .90 x .06	46	56454081	1	Universal Joint
14	56453526	1	Sprocket Weld't.	47	56454093	1	Shaft, Steering
15	56453542	1	Tab, Lock	48	56497308	1	Cup
	56459859	1	Spindle Assembly TSB 791 (#16-34 / before SN1517764)	49	56497560	1	Adapter
	56453031	1	Spindle Assembly TSB 791 (#66-74 / after SN1517763)	50	56497306	1	Steering Wheel
16	56110817	2	Nut, Castle 7/8-14	51	56497542	1	Washer
17	56002228	2	Wsh, Flt SAE 7/8	52	56002098	1	Wsh, flt SAE 1/4
18	56378380	1	Bearing, Ball	53	56002773	1	Nut, Hex Nyl Loc 1/2-20
19	56459861	1	Housing Weld't.	54	56497543	1	Cap
20	56101737	2	Fitting, Lube 1/4-28	55	56016421	1	Decal, 2" Logo
21	56900074	1	Bearing, Race	56	56454100	1	Chain
22	56101370	1	Bearing, Tapered	*	56445118	1	Link
23	56103845	1	Seal, Shaft	57	56459778	1	Sprocket Support Weldment
24	56459638	1	Spindle Weld't. (before SN1517764)	58	56002826	4	Nut, Hex Nyl Loc-Thin 5/16-18
25	56453561	1	Bushing	59	56001939	8	Wsh, Flt SAE 5/16
26	56002181	1	Pin, Cotter .12 x 1.50	60	56009033	1	Scr, Hex Thd Form 1/4-20 x .50
	56459629	1	Wheel Assembly (#27-30 / before SN1517764)	61	56459697	1	Base, Sprocket Support
27	56448169	2	Seal, Wheel	62	56002827	2	Scr, Hex Hd 5/16-18 x 3.50
28	56900073	2	Bearing, Tapered	63	56002221	4	Scr, Hex Hd 5/16-18 x 1.00
29	56448171	2	Bearing, Race	64	56001954	1	Wsh, Flt SAE #10
				65	56002426	1	Scr, Hex Hd 5/16-18 x 2.50
							After SN1517763
				66	56453067	1	Spindle Weld't.
				67	56453029	1	Bushing
				68	56453064	1	Axle
				69	56453068	2	Wheel Assy (#71-74)
				*	56369128	1	Fitting, Lube 1/4-28
				70	56460184	2	Bushing TSBUS2004-859
				71	56448169	2	Seal, Shaft NOTE
				72	56448171	2	Bearing, Cone NOTE
				73	56900073	2	Bearing, Cup NOTE
				74	56453003	1	Wheel NOTE
				75	56460185	1	Bushing TSBUS2004-859

* = Not Shown

NOTE: Quantities are for one wheel assembly.

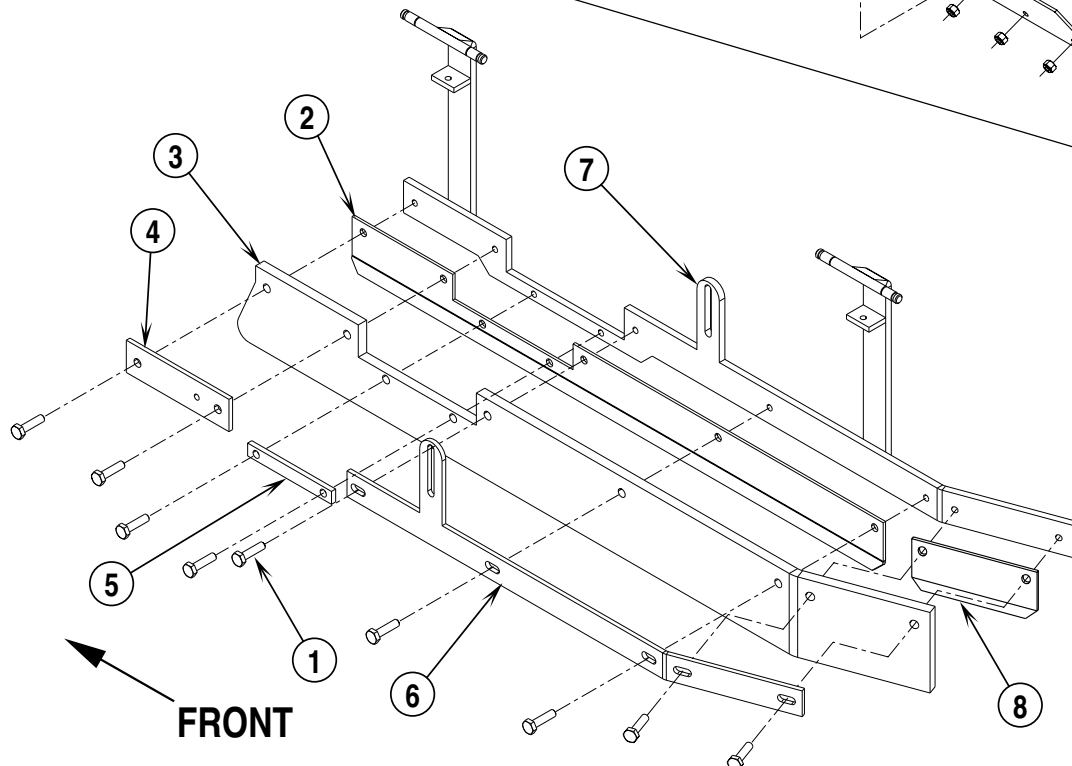
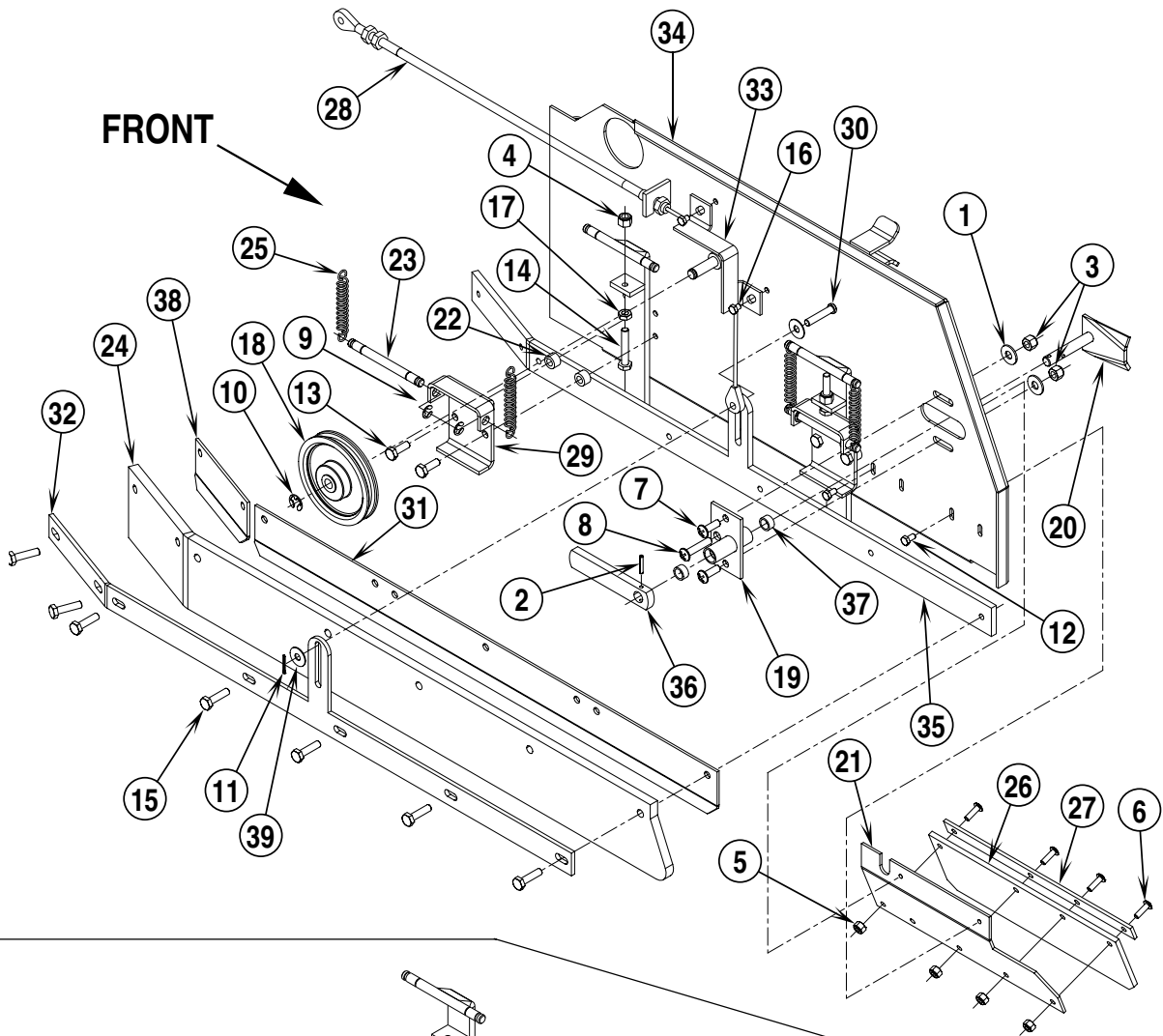


99-4	BROOM HOUSING ASSEMBLY	BOOK E		
03-9	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	19

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
1	56001836	2	Scr, Hex Hd 1/4-20 x .62	36	56453770	1	Rod
2	56001954	3	Wsh, Flt SAE #10	37	56453780	1	Mount Weldment
3	56001967	2	Scr, Hex Hd 1/4-20 x 1.75	38	56453852	1	Plate
4	56002021	4	Scr, Soc Set Loc 5/16-18 x .38	39	56453859	1	Strap
5	56002035	4	Scr, Hex Hd 5/16-18 x .62	40	56453868	1	Blade
6	56002063	4	Wsh, Flt SAE 3/8	41	56455298	4	Spacer See TSB 725 (Note 1)
7	56002221	10	Scr, Hex Hd 5/16-18 x 1.00	42	56455300	2	Pin, Yoke
8	56002225	4	Pin, Spr .31 x 1.50	43	56365068	4	Spring, Ext.
9	56002701	4	Nut, Hex Nyl Loc 5/16-18	44	56459156	1	Strap
10	56002708	4	Nut, Hex Nyl Loc 1/4-20	45	56459157	1	Skirt
11	56002747	2	Scr, Hex Thd To Hd 3/8-16 x 1.50	46	56459158	1	Angle
12	56002768	3	Nut, Hex Nyl Loc 10-24	47	56459659	1	Cable
13	56002896	3	Scr, Pan Phil SS 10-24 x .62	48	56459708	2	Guide, Slide
14	56003015	2	Nut, Hex Jam SS 3/8-16	49	56003166	1	Clevis Pin .25 x 1.25
15	56003219	1	Nut, Hex Nyl SS 3/8-16	50	56030080	1	Decal, Hands Clear
16	56003261	4	Ring, Ret Ext Type E .31 Dia	51	56459725	1	Guard, Pulley
17	56003262	2	Ring, Ret Ext Type E .38 Dia	52	56459728	1	Broom Housing Weldment
18	56002363	1	Pin, Cotter 1/16 x 5/8	53	56459730	1	Left Blade Assembly (see associated pages)
19	56009012	2	Scr, Hex Thd Form 10-24 x .38	54	56459732	1	Right Door Assembly (see associated pages)
20	56009018	4	Scr, Hex Thd Form 1/4-20 x .75 See TSB 725 (Note 1)	55	56472091	1	Gasket 3/8 x 3/8 x 18-1/2
21	56009019	3	Scr, Hex Thd Form 1/4-20 x .38	56	56479273	2	Pillow Block
22	56009033	9	Scr, Hex Thd Form 1/4-20 x .50	57	56364527	1	Knob
23	56009063	2	Scr, Hex Thd Form 10-24 x .25	58	56454133	1	Handle Weldment
24	56009122	4	Wsh, Flt .34 x .93 x .12	59	56002220	2	Wsh, Flt STD 5/16
25	56009179	4	Nut, Hex Machine 1/4-20	60	56002929	2	Scr, Hex Hd Loc 5/16-18 x .62
26	56409141	1	Pulley, Cable	61	56002582	2	Scr, Hex Hd 6-32 x .88
27	56444820	2	Collar	62	56388019	1	Switch, Snap SPST (Broom Switch)
28	56444944	2	Bearing, Flange	63	56454154	1	Bracket, Switch
29	56448112	1	Spring, Ext.	64	56009012	2	Scr, Hex Thd Form 10-24 x .38
30	56453615	1	Belt, Poly "V" 420J12	65	56454150	1	Cable
31	56453722	1	Idler Assembly	66	56454152	1	Turnbuckle
	56453721	1	Lever Weldment	67	56350079	1	Rod Linkage
a	56200972	1	Bearing, Sleeve	68	56002946	1	Pin, Cot .06 x 1.00
b	56171216	1	Pulley, Flat	69	56002098	1	Wsh, Flt SAE 1/4
c	56372773	1	Bearing, Ball	70	56002155	1	Scr, Hex Hd 1/4-20 x .75
d	56456326	1	Ring, Ret Int	71	56454142	1	Bar Weldment
e	56009122	1	Wsh, Flt .34 x .93 x .12	72	56003265	1	Ring, Ret Ext Type E
f	56002922	1	Scr Hex Loc 1/4-20 x .62	73	56320595	2	Bushing .31 x .50 x .28
32	56453730	1	Lever Weldment	74	56454457	1	Motor, 36V, 1HP
33	56453742	1	Lever Weldment	*	56468382	1	Carbon Brush Set
34	56453760	1	Broom Arm Assembly	75	56453779	1	Mount Weldment
	56453750	1	Arm Weldment	76	56002841	2	Nut, Hex Nyl Loc-Thin 3/8-16
g	56479430	2	Bearing, Ball	77	56001873	2	Scr, Hex 3/8-16 x 2.50
h	56470636	1	Idler Lug	78	56453772	1	Sheave, Poly-V
i	56470728	1	Bushing 1 x 1.20 x .90	79	56003240	1	Key, Sq. .19 x 1.12
j	56002141	1	Wsh, Flt SAE 3/4	*	56459244	1	Hopper SS
k	56002862	1	Nut, Hex Nyl Loc 3/4-10	*	56505001	1	Main Broom
35	56453765	1	Arm Assembly	80	56009025	2	Wsh, Flt .266 x .75 x .036
	56453759	1	Arm Weldment				
l	56479430	2	Bearing, Ball				
m	56453767	1	Idler				
n	56453763	1	Spacer				
o	56002141	1	Wsh, Flt SAE 3/4				
p	56002862	1	Nut, Hex Nyl Loc 3/4-10				

* = Not Shown

Note 1: Be sure of correct assembly, four Screws (20) go in the bottom holes of Guides (48) through the Spacers (41) and then they must go into the corresponding bottom holes in the broom housing.



99-4	RIGHT DOOR / LEFT BLADE ASSEMBLIES	BOOK E		
02-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	21

Item	Ref. No.	Qty	Description
RIGHT DOOR ASSEMBLY			
1	56001906	2	Wsh, Flt STD 1/4
2	56001984	1	Pin, Spr. .12 x .75
3	56002491	2	Nut, Hex Nyl Loc SS 1/4-20
4	56002708	2	Nut, Hex Nyl Loc 1/4-20
5	56002836	4	Nut, Hex Nyl Loc SS 10-24
6	56002896	4	Scr, Pan Phil SS 10-24 x .62
7	56002957	2	Scr, Pan Phil SS 1/4-20 x .75
8	56002958	1	Scr, Pan Phil SS 1/4-20 x 1.25
9	56003261	4	Ring, Ret Ext Type E .31 Dia
10	56003262	1	Ring, Ret Ext Type E .38 Dia
11	56002363	1	Pin, Cotter 1/16 x 5/8
12	56009012	2	Scr, Hex Thd Form 10-24 x .38
13	56009018	4	Scr, Hex Thd Form 1/4-20 x .75 See TSB 725 (Note 1)
14	56009028	2	Scr, Hex Thd Form 1/4-20 x 1.50
15	56009054	7	Scr, Hex Type 23 1/4-20 x 1.00
16	56009063	2	Scr, Hex Thd Form 10-24 x .25
17	56009087	2	Nut, Hex Jam 1/4-20
18	56409141	1	Pulley, Cable
19	56453680	1	Bracket Weldment
20	56453690	1	Latch Weldment
21	56453854	1	Plate
22	56455298	4	Spacer See TSB 725 (Note 1)
23	56455300	2	Pin, Yoke
24	56459853	1	Blade, Right Side
**	56455302	1	Blade, Right Side, Gum Rubber
25	56365068	4	Spring, Extension
26	56459415	1	Blade
27	56459416	1	Strap
28	56459660	1	Cable Assembly
29	56459708	2	Guide, Slide
30	56003166	1	Clevis Pin .25 x 1.25
31	56455753	1	Strip Forming
32	56459712	1	Plate, Right Side Actuator
33	56459725	1	Guard, Pulley
34	56459733	1	Door Weldment
35	56459734	1	Right Blade Weldment
36	56479371	1	Handle
37	56491658	2	Bearing, Sleeve
38	56455751	1	Strip, Rear Forming
39	56009025	2	Wsh, Flt .266 x .750 x .036

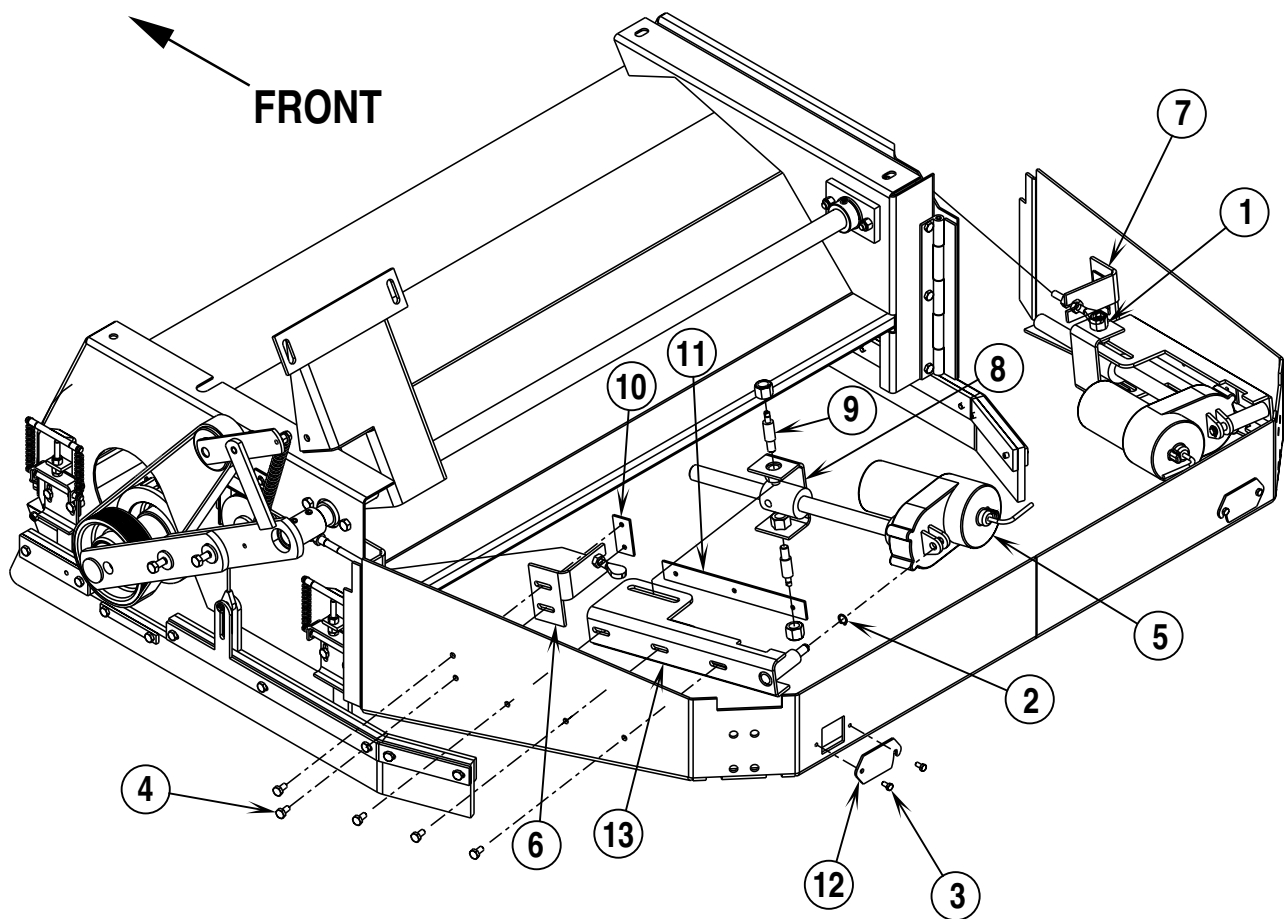
** = Optional Accessory

Note 1: Be sure of correct assembly, four Screws (13) go in the bottom holes of Guides (29) through the Spacers (22) and then they must go into the corresponding bottom holes in the door weldment.

Item	Ref. No.	Qty	Description
LEFT BLADE ASSEMBLY			
1	56009054	9	Scr, Hex Type 23 1/4-20 x 1.00
2	56455755	1	Strip Forming
3	56459852	1	Blade, Left Side
**	56455356	1	Blade, Left Side, Gum Rubber
4	56458898	1	Strap
5	56459257	1	Strap
6	56459707	1	Plate, Left Side Actuator
7	56459731	1	Left Blade Weldment
8	56455751	1	Strip, Rear Forming

** = Optional Accessory

BOOK E			ACTUATOR MOUNTING ASSEMBLY	99-4
E	9.9.1	22	Hydro-Retriever™ 2052B / CR 1300B	01-1

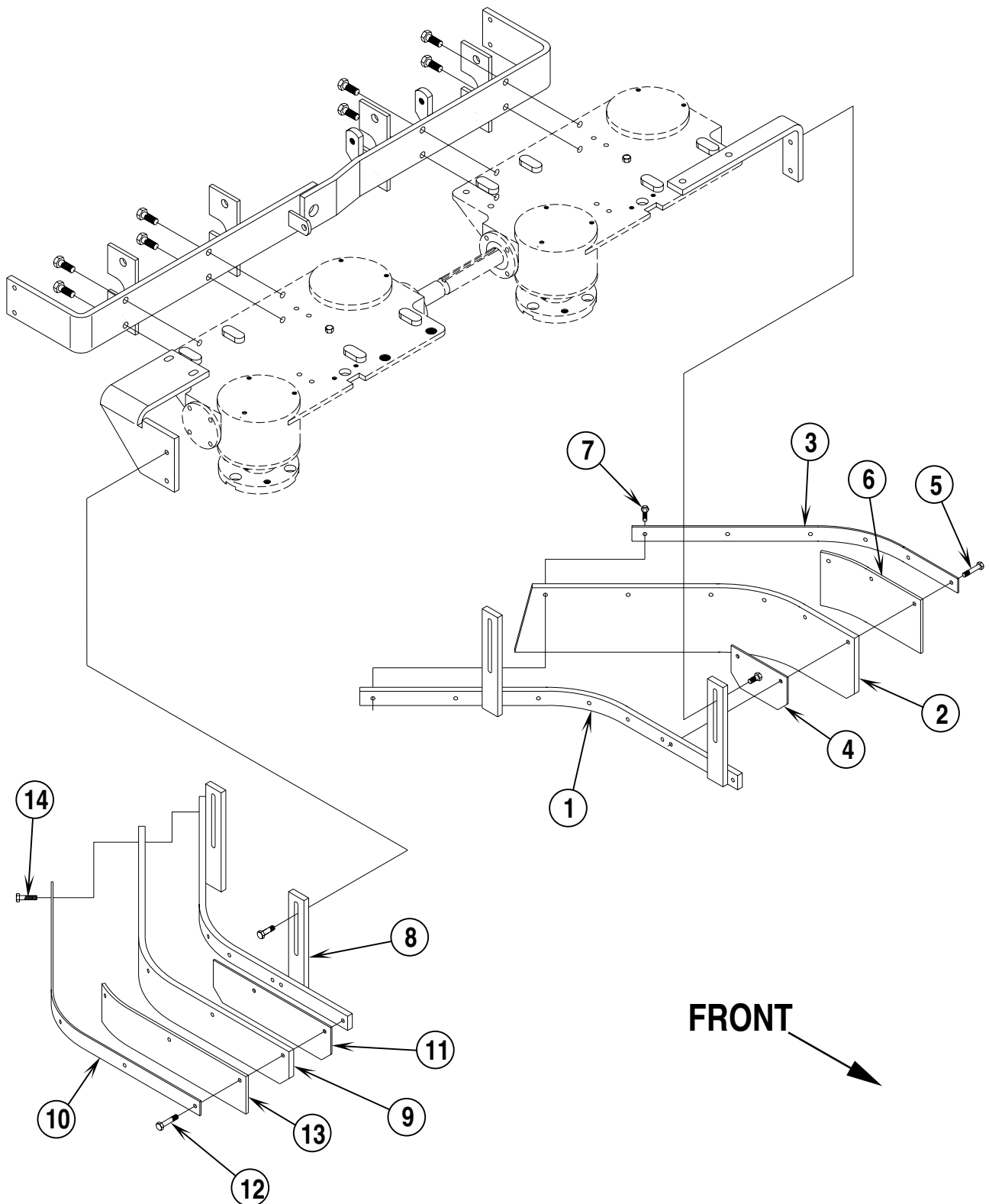


99-4	ACTUATOR MOUNTING ASSEMBLY Hydro-Retriever™ 2052B / CR 1300B	BOOK E		
01-1		E	9.9.1	23

Item	Ref. No.	Qty	Description
1	56002770	4	Nut, Hex Nyl Loc 1/2-13
2	56003253	2	Ring, Ret Ext
3	56009012	4	Scr, Hex Thd Form 10-24 x .38
4	56009033	10	Scr, Hex Thd Form 1/4-20 x .50
5	56391627	2	Actuator Motor
*	56388520	1	Replacement Plastic Nut
*	56470431	1	Carbon Brush Set
6	56459716	1	Mount, Rear Left Cable
7	56459718	1	Mount, Rear Right Cable
8	56459719	2	Pin Retainer Weldment
9	56459720	4	Pin, Nut
10	56459722	2	Plate, Nut
11	56459723	2	Plate, Nut
12	56459751	2	Cover, Access
13	56459781	2	Actuator Mount Weldment

* = Not Shown

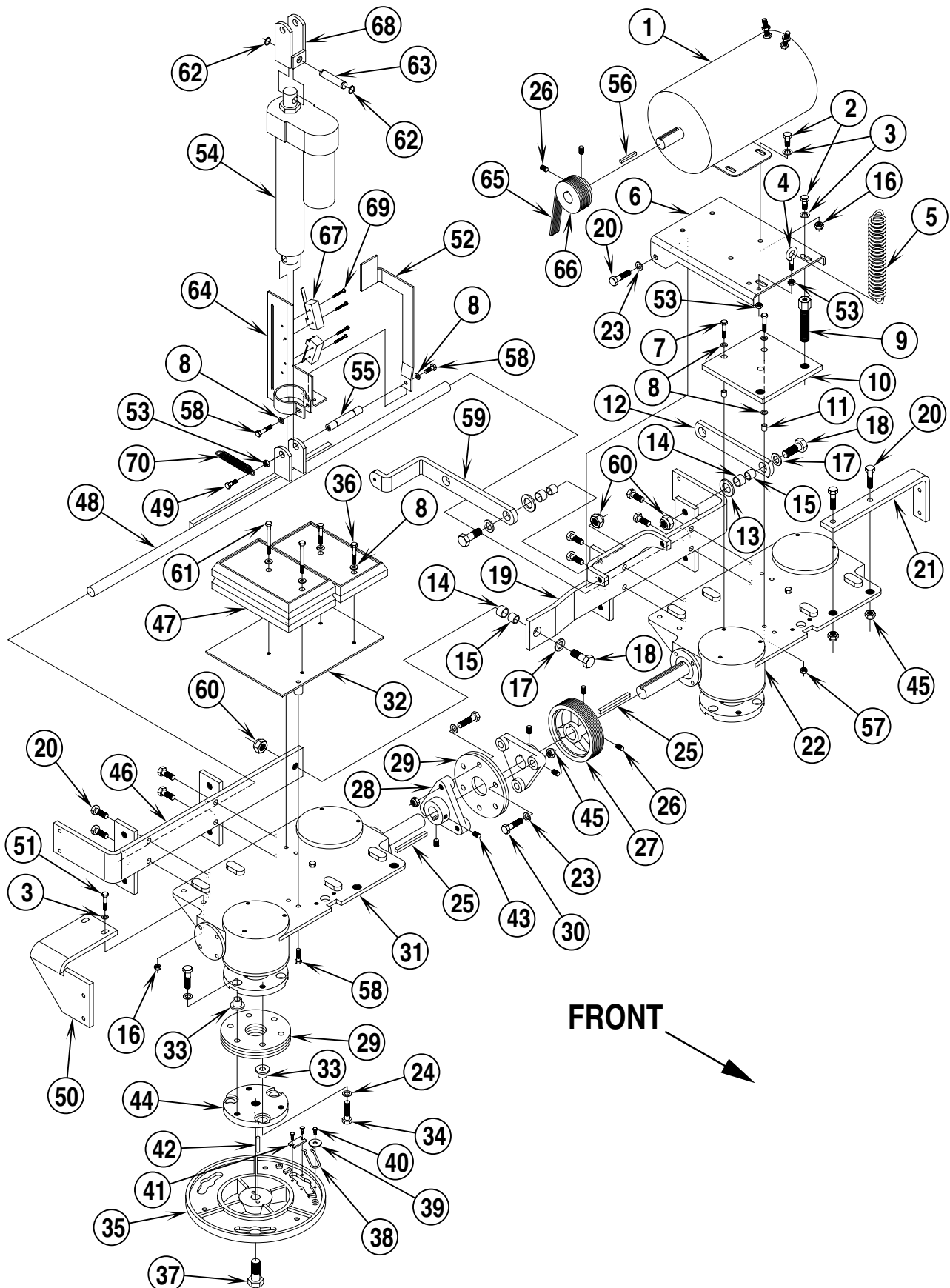
BOOK E			FRONT SKIRT ASSEMBLIES	99-4
E	9.9.1	24	Hydro-Retriever™ 2052B / CR 1300B	01-1



99-4	FRONT SKIRT ASSEMBLIES Hydro-Retriever™ 2052B / CR 1300B	BOOK E		
01-1		E	9.9.1	25

Item	Ref. No.	Qty	Description
	56458880	1	Skirt Assembly, Left (#1-7)
	56458878	1	Skirt Assembly, Right (#8-14)
1	56458852	1	Mount Weld't., Left
2	56459854	1	Blade
**	56458928	1	Blade, Gum Rubber
3	56458874	1	Strap
4	56458934	1	Plate
5	56009088	3	Scr, Hex Thd Form 1/4-20 x 1.25
6	56458930	1	Blade, Backup
7	56009182	3	Scr, Hex Thd Form 1/4-20 x 1.00
8	56458850	1	Mount Weld't., Right
9	56459855	1	Blade
**	56458840	1	Blade, Gum Rubber
10	56458844	1	Strap
11	56458936	1	Plate
12	56009088	3	Scr, Hex Thd Form 1/4-20 x 1.25
13	56458932	1	Blade, Backup
14	56009182	3	Scr, Hex Thd Form 1/4-20 x 1.00

** = Optional Accessory

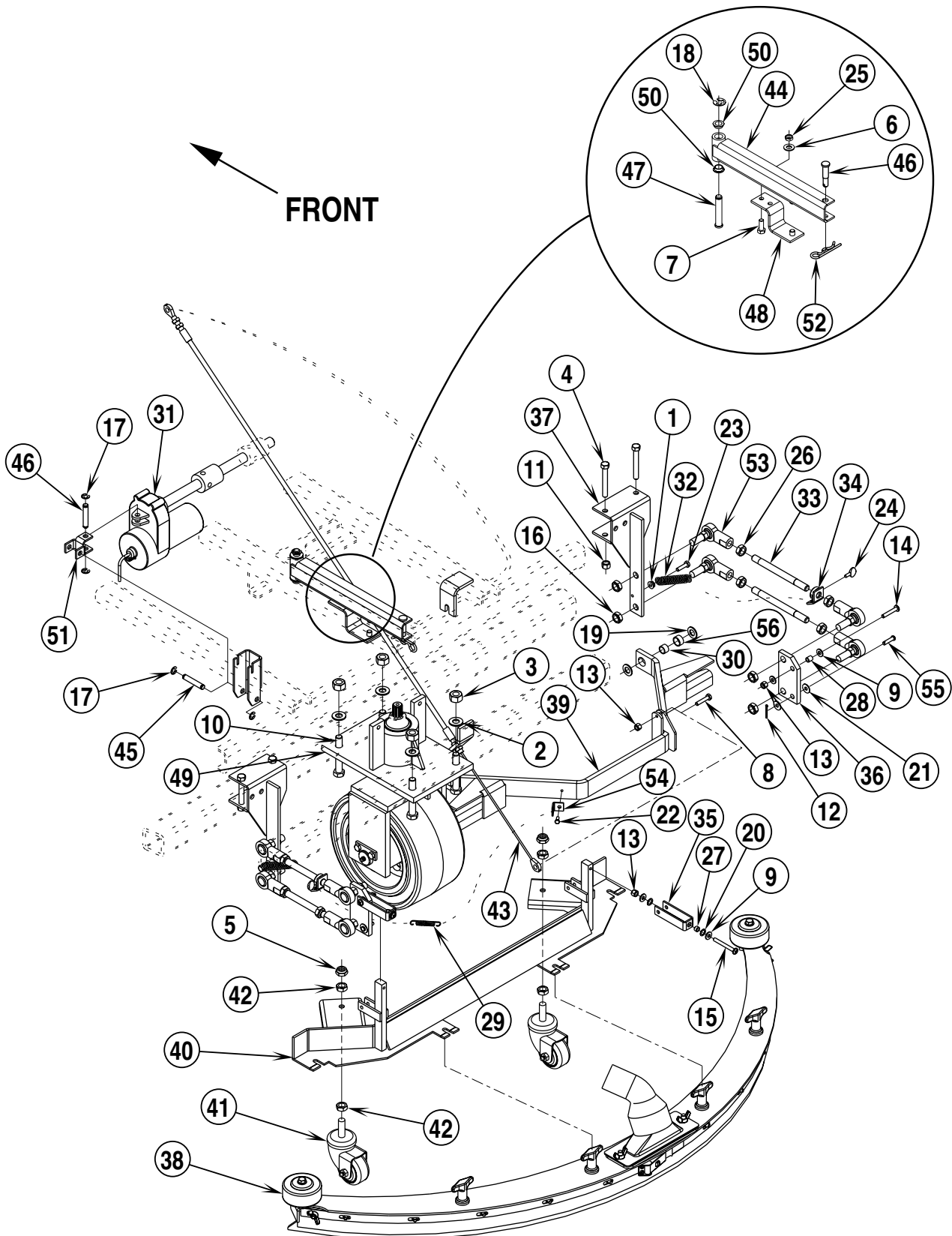


99-4	BRUSH DRIVE	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	27

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
1	56409825	1	Brush Drive Motor	44	56448263	4	Lower Coupler
2	56002667	6	Scr, Hex 5/16-18 X .75	45	56002769	8	Nut, Hex Nyl Loc 3/8-16
3	56002220	8	Wsh, Flt Std 5/16	46	56458868	1	Right Gear Case Bracket
4	56009254	1	Bolt, Eye 1/4-20 X 1.12	47	56453907	3	Weight
5	56381993	1	Spring	48	56453912	1	Bar
6	56460079	1	Motor Mount Weld't.	49	56002093	1	Scr, Hex 1/4-20 X 1.00
7	56001833	3	Scr, Hex 1/4-20 X 1.50	50	56458051	1	Plate
8	56001906	10	Wsh, Flt Std 1/4	51	56002221	2	Scr, Hex 5/16-18 X 1.00
9	56378631	2	Stud	52	56452287	1	Bracket
10	56453903	1	Plate	53	56009087	3	Nut, Hex Jam 1/4-20
11	56321532	3	Bushing	54	56452185	1	Actuator
12	56453909	7	Parallel Bar	55	56453998	1	Pin
13	56009022	17	Wsh, Flt .752/.756 X 1.250 X .125	56	56003241	1	Key, Sq. .19 X 1.31
14	56367168	17	Bearing	57	56002708	1	Nut, Hex Nyl Loc 1/4-20
15	56367206	17	Bushing	58	56002155	3	Scr, Hex 1/4-20 X .75
16	56002701	6	Nut, Hex Nyl Loc 5/16-18	59	56454169	1	Bar
17	56009017	17	Wsh, Flt Harden .516 X .938 X .075	60	56002770	17	Nut, Hex Nyl Loc 1/2-13
18	56001995	17	Scr, Hex 1/2-13 X 1.75	61	56001855	2	Scr, Hex 1/4-20 X 2.50
19	56458866	1	Left Gear Case Bracket	62	56003264	6	Ring Retainer Ext Type E
20	56002947	12	Scr, Hex Loc 3/8-16 X 1.00	63	56468684	2	Pin
21	56458854	1	Strap	64	56452286	1	Bracket Weldment
22	56550114	1	Left Gear Case	65	56459447	1	Belt
23	56002063	8	Wsh, Flt SAE 3/8	66	56459446	1	Sheave
24	56002068	24	Wsh Loc HI-Collar 3/8	67	56452290	2	Switch
25	56003249	2	Key, Sq. .25 X 3.00	68	56454178	1	Yoke
26	56009131	4	Scr, Soc Set Loc 5/16-18 X .31	69	56003009	4	Scr, Hex 6-32 X 1.00
27	56459445	1	Sheave	70	56370355	1	Spring, .50 x 4.75
28	56462527	2	Universal Casting	*	56505768	4	MidLite 180 Brush (standard)
29	56104647	14	Disc	**	56505761	4	Magna-Grit 46 Brush
30	56003031	6	Scr, Hex Loc 3/8-16 X 2.00	**	56505762	4	Dyna-Grit 80 Brush
31	56550115	1	Right Gear Case	**	56505764	4	Prolene Brush
32	56453916	1	Weight Bracket	**	56505763	4	Aglite-Grit 500 Brush
33	56448268	24	Bushing	**	56505765	4	Prolite Brush
34	56003031	24	Scr, Hex Loc 3/8-16 X 2.00	**	56505766	4	Union Mix Brush
35	56363189	4	Brush Holder	**	56505767	4	MidGrit 240 Brush
36	56001833	2	Scr, Hex 1/4-20 X 1.50	**	56505760	4	Pad Holder
37	56002156	4	Scr, Hex 5/8-18 X 1.50				
38	56366463	4	Spring Retainer				
39	56009002	4	Wsh, Flt .266 X .906 X .060				
40	56002043	8	Scr, Pan Phil 10-24 X .38				
41	56366455	4	Plate				
42	56362077	8	Pin				
43	56001826	4	Scr, Soc Set Loc 5/16-18 X .50				

* = Not Shown

** = Optional Accessory



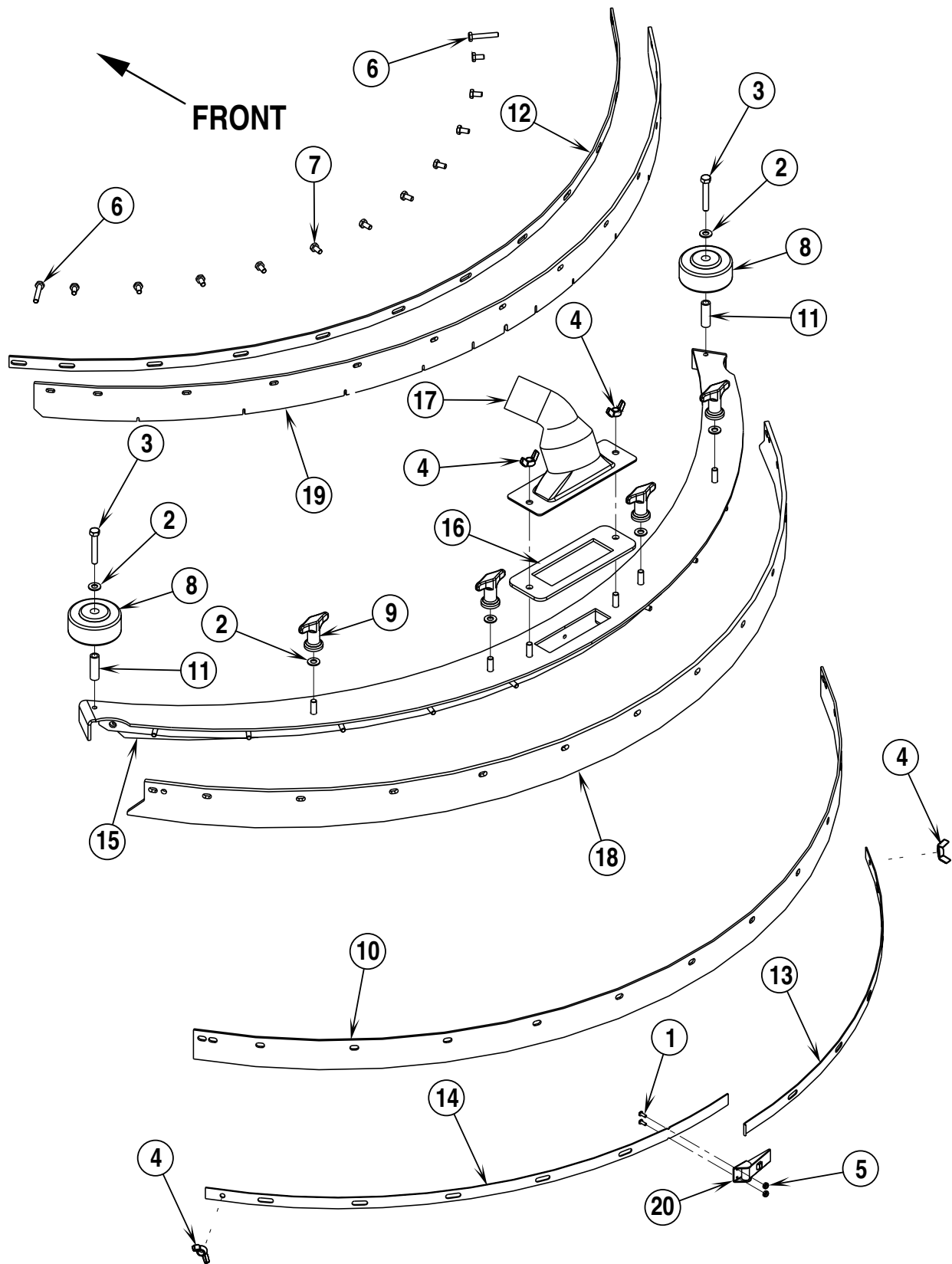
99-4	SQUEEGEE MOUNT ASSEMBLY	BOOK E		
04-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	29

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
1	56001827	2	Nut, Whiz 1/4-20	33	56454273	4	Rod
2	56001879	4	Wsh, Flt SAE 1/2	34	56454276	2	Collar Weldment
3	56001891	4	Nut, Hex Hvy 1/2-13	35	56454285	2	Yoke
4	56001892	4	Scr, Hex Hd 3/8-16 x 2.75	36	56454288	2	Plate
5	56002843	2	Nut, Hex Nyl Loc-Thin1/2-13 (See Note 1)	37	56454323	2	Bracket Weldment TSBUS2004-860
6	56001939	2	Wsh, Flt SAE 5/16	38	56458816	1	Squeegee Assembly (before SN1321040)
7	56002035	2	Scr, Hex Hd 5/16-18 x .62		56459940	1	Squeegee Assembly (after SN1321039)
8	56001878	1	Scr, Hex Hd 1/4-20 x 1.25	39	56458818	1	Lifter Weldment
9	56002098	8	Wsh, Flt SAE 1/4	40	56458836	1	Tool Mount Weldment
10	56002116	4	Scr, Hex Hd 1/2-13 x 3.25	41	56407344	2	Caster Wheel (See Note 1)
11	56002123	4	Nut, Hex Machine 3/8-16	42	56009016	4	Nut, Hex Jam 1/2-13 (See Note 1)
12	56002363	2	Pin, Cotter 1/16 x 5/8	43	56459658	1	Cable Assembly
13	56002708	5	Nut, Hex Nyl Loc 1/4-20	44	56459790	1	Lever Arm Weldment
14	56002786	2	Scr, Pan Phil 1/4-20 x 1.50	45	56459791	2	Pin
15	56002788	2	Scr, Pan Phil 1/4-20 x 2.25	46	56459792	1	Pin
16	56002868	8	Nut, Hex Nyl Loc-Thin 1/2-20	47	56459794	1	Pin
17	56003262	4	Ring, Ret Ext Type E .38 Dia	48	56459795	1	Yoke Weldment (before SN1321040)
18	56003264	1	Ring, Ret Ext Type E .50 Dia		56100019	1	Yoke Weldment (after SN1321039)
19	56009017	4	Wsh, Flt Harden .51 x .93 x .75	49	56459859	1	Spindle Assy (before SN1517764) TSB 791 (see <i>Steering & Spindle Assembly</i>)
20	56009023	4	Washer, Wave .375		56453031	1	Spindle Assy (after SN1517763) TSB 791 (see <i>Steering & Spindle Assembly</i>)
21	56009025	4	Wsh, Flt .26 x .75 x .03	50	56459872	2	Bearing, Flange
22	56009039	1	Scr, Hex Thd Form 10-24 x .50	51	56459888	1	Yoke, Actuator
23	56009054	2	Scr, Hex Type 23 1/4-20 x 1.00	52	56477583	1	Pin, .15 Hairpin Cotter
24	56009058	2	Screw, Thumb 1/4 x 1/2	53	56477813	8	Ball Joint
25	56009086	2	Nut, Hex Jam 5/16-18	54	56482208	1	Tab
26	56009089	8	Nut, Hex Jam 1/2-20	55	56487989	2	Clevis Pin .25 x 1.00
27	56206784	2	Bushing	56	56491656	2	Bearing, Sleeve
28	56321532	2	Bushing, .25 x .37 x .40				
29	56358560	1	Spring				
30	56360627	2	Bushing				
31	56391627	1	Actuator, Motor				
*	56388520	1	Replacement Plastic Nut				
*	56470431	1	Carbon Brush Set				
32	56448112	2	Spring, Ext				

* = Not Shown

Note 1: The original caster had a threaded shaft of 3/8", this caster (56407344 has a 1/2" diameter shaft. When replacing a 3/8" caster you will need to order 1/2" nuts (56002843 & 56009016). The holes in (40) Mount Weldment will have to be drilled out to a diameter of 1/2" to accommodate the new casters. Replace both casters together if replacing a caster with a 3/8" shaft.

BOOK E			SQUEEGEE ASSEMBLY (before SN1321040)	99-4
E	9.9.1	30	Hydro-Retriever™ 2052B / CR 1300B	01-1

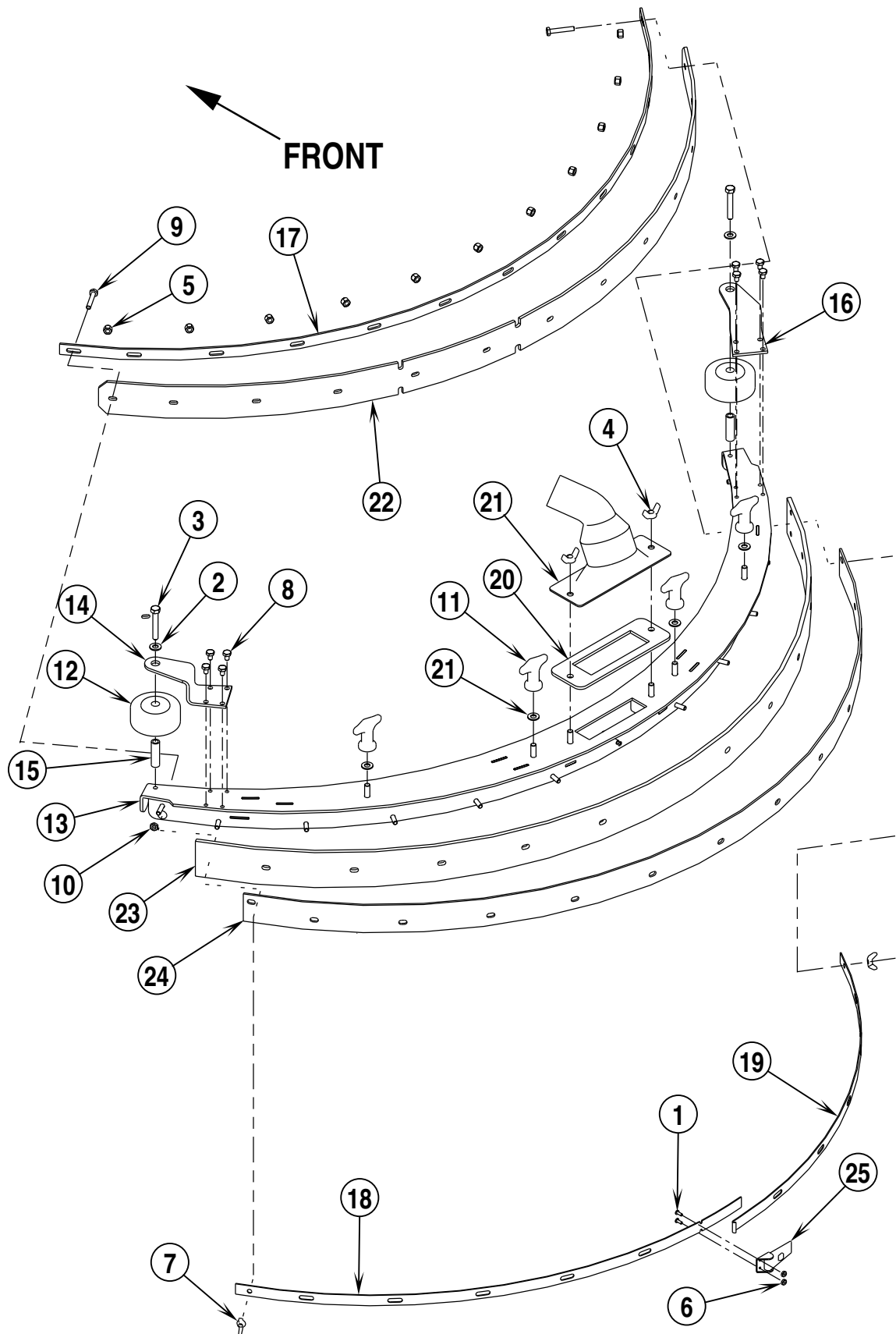


99-4	SQUEEGEE ASSEMBLY (before SN1321040)	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	31

Item	Ref. No.	Qty	Description
	56458816	1	Squeegee Assembly
1	56001904	2	Scr, Pan Phil 6-32 x .38
2	56001939	6	Wsh, Flt SAE 5/16
3	56002013	2	Scr, Hex Thd To Hd 5/16-18 x 2.00
4	56002370	4	Nut, Wing 5/16-18
5	56002864	2	Nut, Hex Nyl Loc-Thin 6-32
6	56009028	2	Scr, Hex Thd Form 1/4-20 x 1.50
7	56009033	11	Scr, Hex Thd Form 1/4-20 x .50
8	56368127	2	Wheel, 3.00 x 1.25
9	56370711	4	Nut, Thumb
10	56454215	1	Blade
11	56454249	2	Bushing
12	56458810	1	Strap
13	56458812	1	Strap
14	56458814	1	Strap
15	56459109	1	Tool Weldment
16	56459281	1	Gasket, Inlet
17	56459432	1	Adapter, Squeegee
18	56459885	1	Blade, Rear
19	56459886	1	Blade, Front
20	56471194	1	Latch
*	56459937	1	Hose, Squeegee
*	56352829	1	Clamp, Hose
**	56458914	1	Gum Rubber Squeegee Blade Kit (#18 & 19 / optional)
**	56454209	1	Blade, Rear
**	56455608	1	Blade, Front

* = Not Shown

** = Optional Accessory



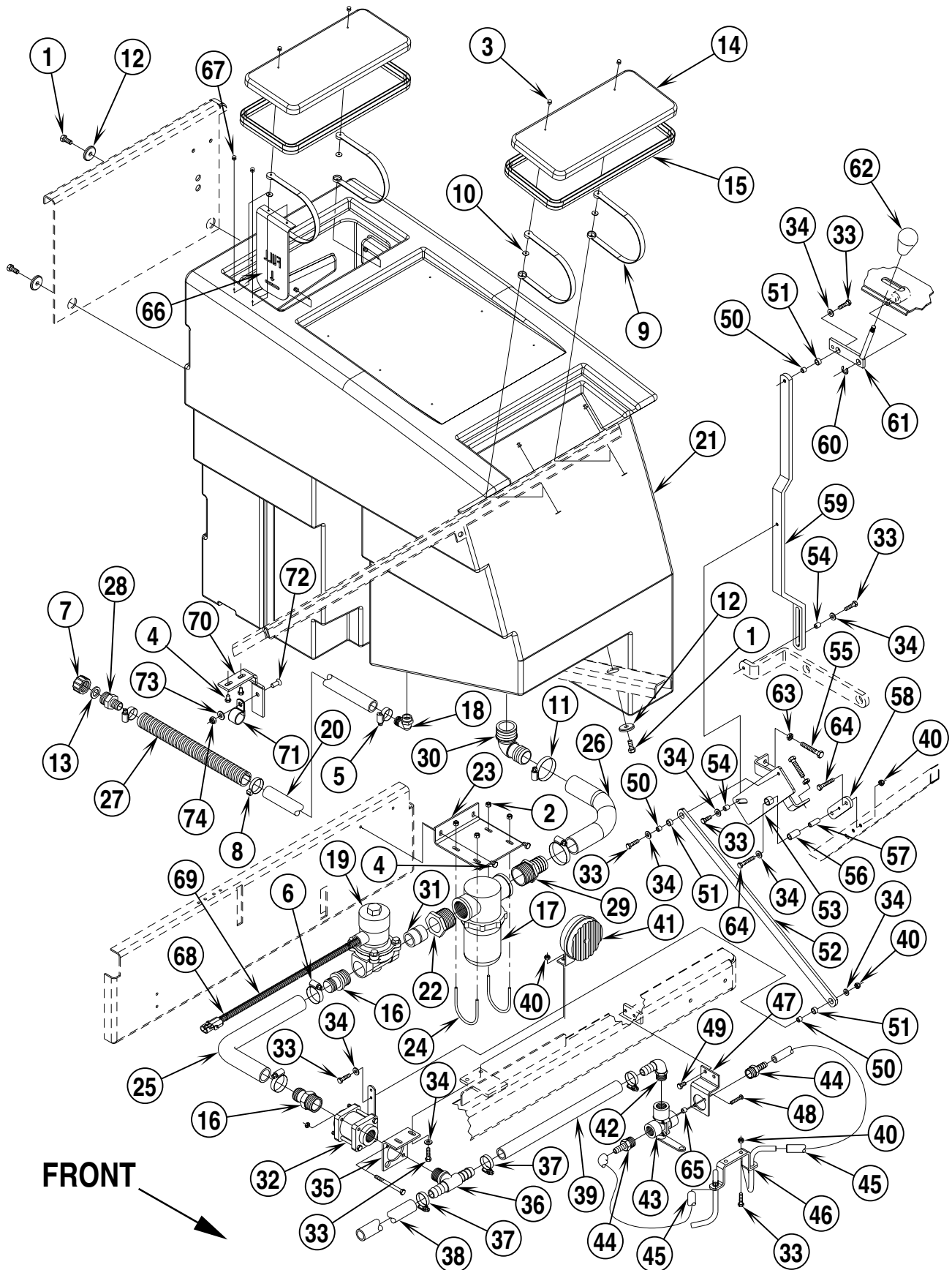
99-4	SQUEEGEE ASSEMBLY (after SN1321039)	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	33

Item	Ref. No.	Qty	Description
	56459940	1	Squeegee Assembly
1	56001904	2	Scr, Pan Phil 6-32 x .38
2	56001939	6	Wsh, Flt SAE 5/16
3	56002013	2	Scr, Hex Thd To Hd 5/16-18 x 2.00
4	56002370	2	Nut, Wing 5/16-18
5	56002708	11	Nut, Hex Nyl Loc 1/4-20
6	56002864	2	Nut, Hex Nyl Loc-Thin 6-32
7	56003089	2	Nut, Wing 1/4-20
8	56009019	8	Scr, Hex Thd Form 1/4-20 x .38
9	56009028	2	Scr, Hex Thd Form 1/4-20 x 1.50
10	56009087	2	Nut, Hex Jam 1/4-20
11	56370711	4	Nut, Thumb
12	56386127	2	Wheel, 3.00 x 1.25
13	56455874	1	Tool Weldment
14	56455877	1	Mount, Left Squeegee Wheel
15	56455878	2	Bushing
16	56455883	1	Mount, Right Squeegee Wheel
17	56455964	1	Strap, Front Blade
18	56455965	1	Strap, Rear Left Blade
19	56455966	1	Strap, Rear Right Blade
20	56459281	1	Gasket, Inlet
21	56459432	1	Adapter, Squeegee
22	56459941	1	Blade, Front
23	56459942	1	Blade, Rear
24	56459943	1	Blade, Rear Backing
25	56471194	1	Latch
*	56459937	1	Hose, Squeegee
*	56352829	1	Clamp, Hose
**	56459944	1	Blade Kit (Linatex)
**	56459947	1	Blade Kit (Gum Rubber)

* = Not Shown

** = Optional Accessory

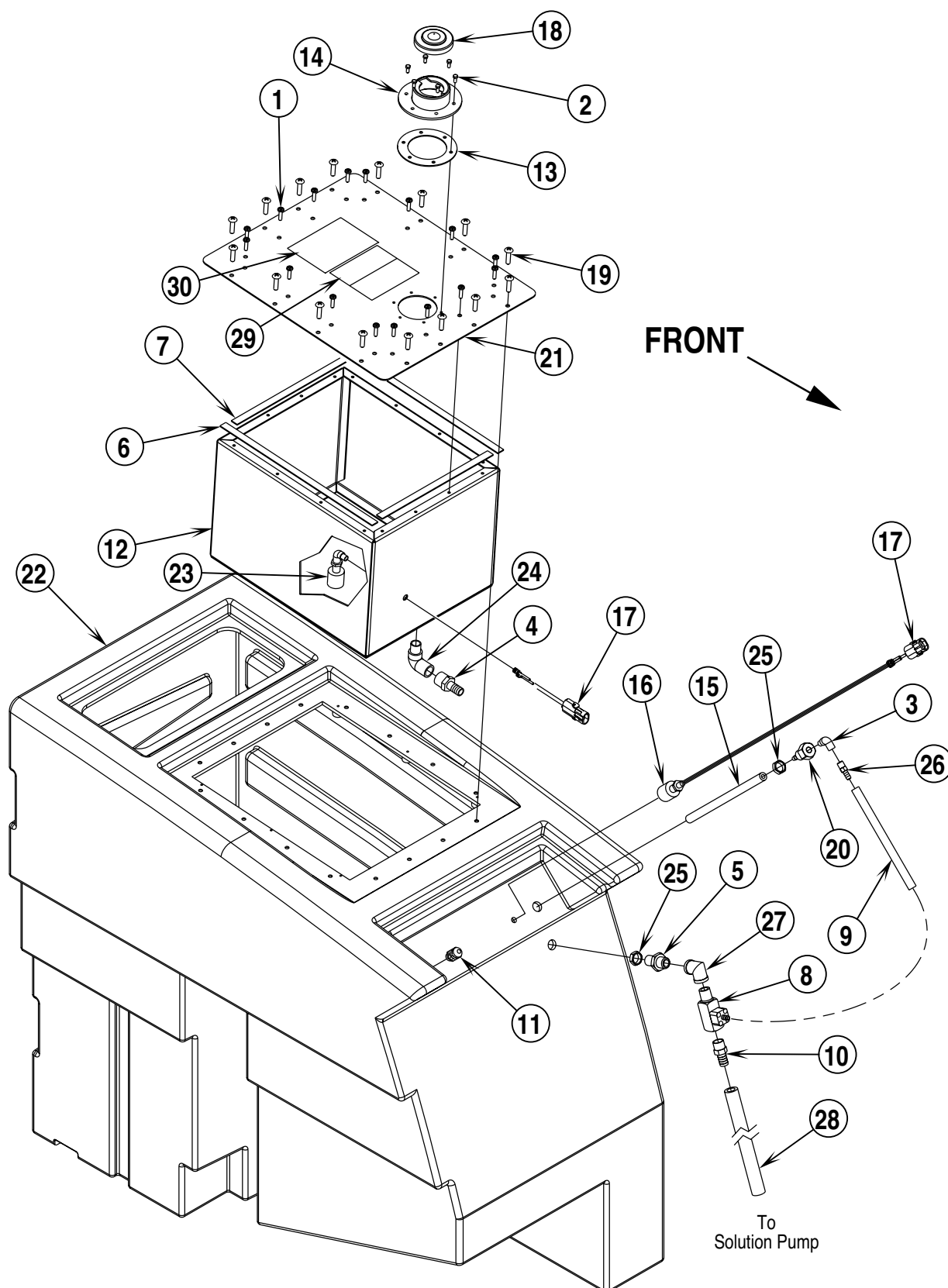
BOOK E			SOLUTION SYSTEM (STANDARD)	99-4
E	9.9.1	34	Hydro-Retriever™ 2052B / CR 1300B	01-1



99-4	SOLUTION SYSTEM (STANDARD)	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	35

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
1	56002667	3	Scr, Hex Hd 5/16-18 X .75	40	56002708	9	Nut, Hex Nyl Loc 1/4-20
2	56002768	4	Nut, Hex Nyl Loc 10-24	41	56482365	1	Horn
3	56003293	8	Rivet, Pop A/S .125X .38/ .50	42	56244985	2	Barb
4	56009019	4	Scr, Hex Thd Form 1/4-20 X .38	43	56454612	2	Flow Control Valve
5	56112771	2	Clamp, Hose SAE #10		56454614	2	Flow Control Valve Assembly (#42,43,44,47,65)
6	56131601	2	Clamp, Hose SAE #16	44	56749202	4	Barb
7	56255076	1	Cap, Pipe GHT Nylon	45	56456830	4	Tube, Wire Reinforced
8	56262089	1	Cable Tie	46	56453924	2	Solution Pipe
9	56263379	4	Strap Cover	47	56453936	2	Bracket
10	56009098	8	Wsh, Flat SS .125 X .500 X .036	48	56002728	4	Scr, Pan Phil Thd Form 10-24 X 1.25
11	56329145	2	Clamp, Hose SAE #24	49	56003039	4	Scr, Hex Loc 1/4-20 X .50
12	56358959	3	Washer, Flat	50	56368989	3	Bushing
13	56368776	1	Washer, Rubber	51	56368970	3	Bearing
14	56407277	2	Solution Tank Cover	52	56454159	1	Bar
15	56407282	2	Gasket	53	56454161	1	Plate
16	56454168	2	Barb, 1 X 1 PVC	54	56321532	2	Bushing
17	56456241	1	Strainer, In-Line	55	56002013	2	Scr, Hex Thd to Hd 5/16-18 X 2.00
*	56455838	1	Replacement Strainer Bowl	56	56200972	1	Bearing
18	56456802	1	Barb, 90 Elbow 11/16 X 3/4 NPT	57	56471220	1	Bushing
19	56459625	1	Valve 2 Way Solenoid	58	56454164	1	Bar
20	56459674	1	Hose, Spiral	59	56454158	1	Bar
21	56459682	1	Tank, Solution Routed	60	56003262	1	Ring Ret Ext Type E
22	56459825	1	Bushing, Reducer	61	56454157	1	Lever
23	56459827	1	Bracket	62	56364527	1	Knob
24	56459830	2	U-Bolt	63	56009086	2	Nut, Hex Jam 5/16-18
25	56459858	1	Hose, Spiral	64	56001833	3	Scr, Hex 1/4-20 X 1.50
26	56481287	1	Hose, Radiator	65	56200123	4	Bushing
27	56459890	1	Conduit, 12"	66	56459868	1	Indicator, Level
28	56900273	1	Barb, Adapter 3/4 X 3/4 GHT	67	56003293	2	Rivet, Pop
29	56900910	1	Barb, Adapter 1 1/4 X 1 1/4 NPT	68	56325219	2	Cable, Tie
30	56900913	1	Barb, Elbow Male	69	56459883	1	Conduit, 16"
31	56900914	1	Nipple, Close PVC	70	56459905	1	Support, Drain Hose
32	56456617	1	Valve (w/handle)	71	56409463	1	Clamp, Hose
	56454280	1	Handle	72	56002476	1	Scr, Flt Phil 5/16-18 x .62
33	56002093	11	Scr, Hex 1/4-20 X 1.00	73	56001939	1	Wsh, Flt SAE 5/16
34	56002098	9	Wsh, Flt SAE 1/4	74	56002701	1	Nut, Hex Nyl Loc 5/16-18
35	56454357	1	Bracket				
36	56454609	1	Tee				
37	56112771	4	Hose Clamp				
38	56481452	1	Tube				
39	56449850	1	Tube				

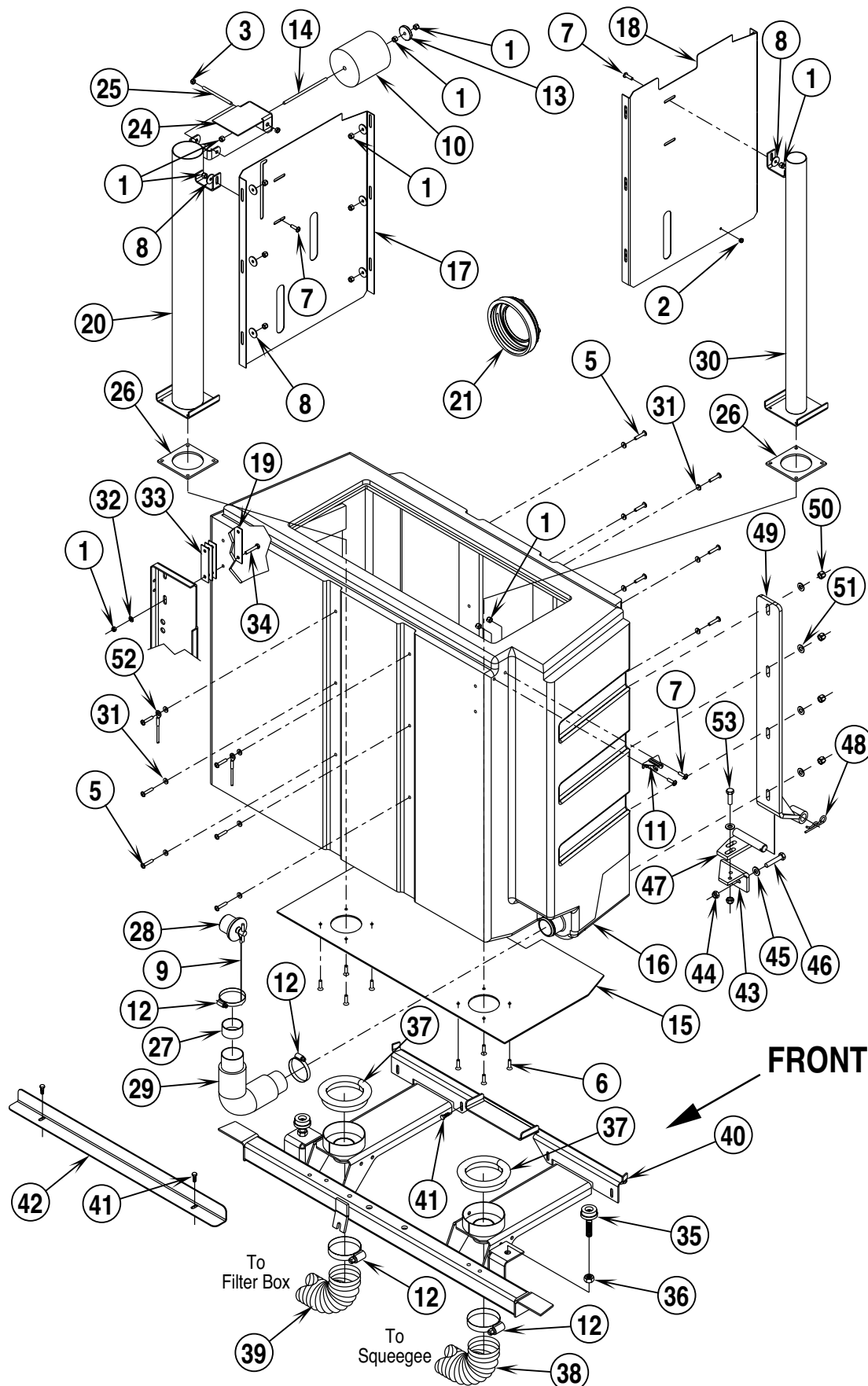
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99-4	SOLUTION SYSTEM (HYDRO-MAX™ II)	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	37

Item	Ref. No.	Qty	Description
	56459957	1	Hydro-Max™II Solution Tank Assembly (#1-28)
1	56009043	16	Scr, Pan Phil Thd Form 10-24 x .75
2	56009075	6	Scr, Hex Thd Form 8-32 x .38
3	56111309	1	Elbow, 90 Street
4	56118117	1	Barb, Adapter 1/2 x 1/2NPT
5	56172072	1	Nipple, 3/8NPT x 5/8-18
6	56200754	2	Gasket, .06 x .50 x 13.12
7	56200754	2	Gasket, .06 x .50 x 9.56
8	56260170	1	Injector
9	56260841	1	Hose, 9.00
10	56443972	1	Barb, Adapter 1/2 x 3/8NPT
11	56456027	1	Strain Relief
12	56456098	1	Tank, Chemical
13	56456104	1	Gasket
14	56456137	1	Filler Weldment
15	56456560	1	Hose, 9.00
16	56459260	1	Switch Assembly
17	56462360	2	Connector, W.P. Male 2-Way
18	56478502	1	Cap, Fuel Tank
19	56009006	16	Scr, Pan Phil SS Type AB 10-16 x 1.00
20	56456107	1	Barb, Bulkhead
21	56459910	1	Cover, Chemical Tank
22	56459955	1	Tank, Solution
23	56460015	1	Switch Assembly
24	56742125	1	Elbow, 90 Street
25	56745860	2	Nut, Jam 5/8-18 Brass
26	56755162	1	Barb, Metering (stamped C)
27	56757310	1	Elbow, 3/8 x 90 Brass
28	56900298	1	Hose, Spiral
29	56025596	1	Decal
30	56025590	1	Decal, Detergent Ratio

NOTE: Except for the items listed on this page, all other solution system components are the same as the Standard Solution System.

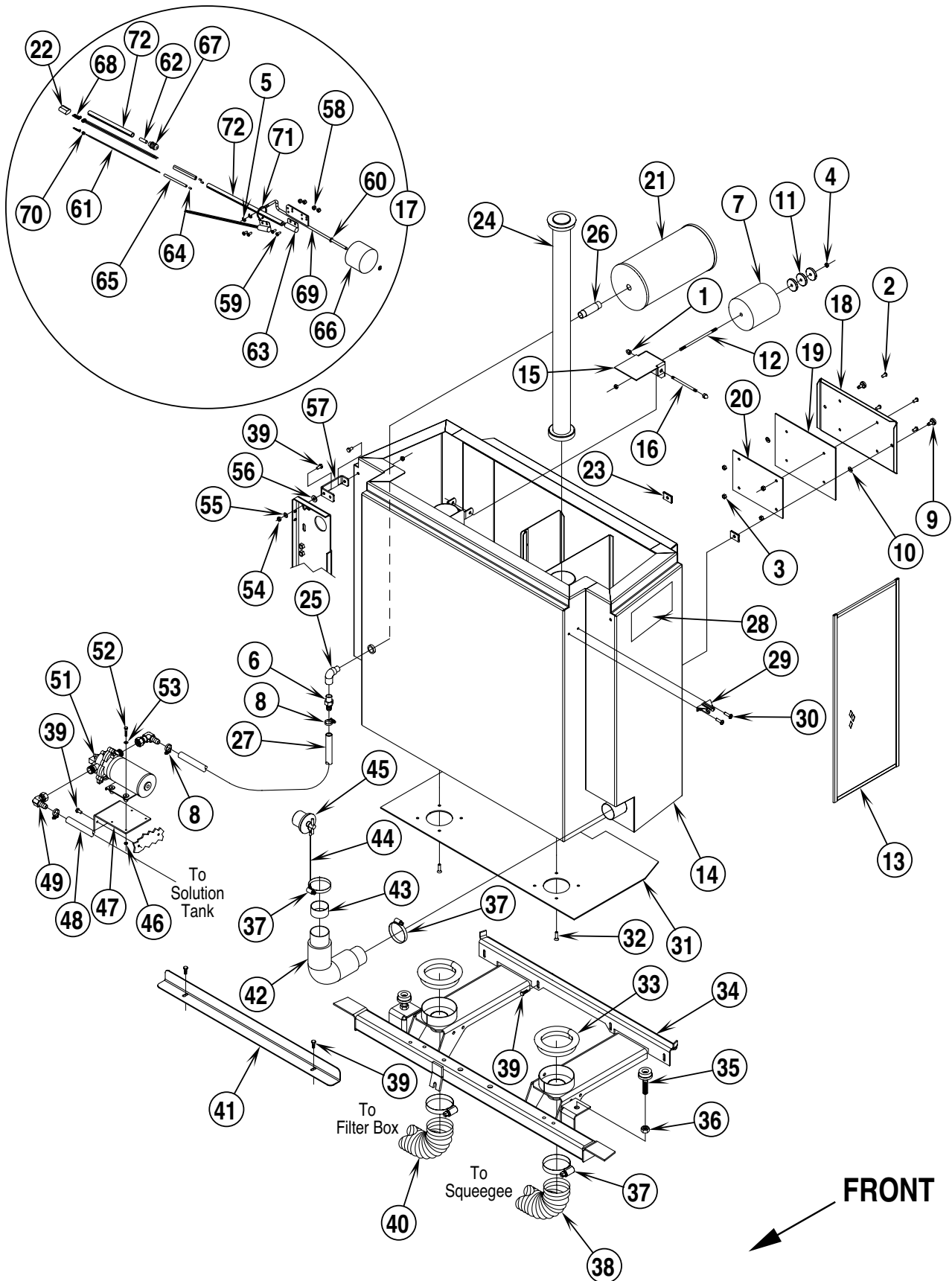


99-4	RECOVERY TANK (STANDARD)	BOOK E		
01-2	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	39

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
	56459799	1	Recovery Tank Assy (1-31 / 2052 before Sept. 2000)	22			Intentionally Omitted
	56459954	1	Recovery Tank Assy (1-31 / CR1300 before Sept. 2000)	23			Intentionally Omitted
	56460059	1	Recovery Tank Assy (1-18, 20-31, 49-51 / 2052 after Aug. 2000)	24	56459130	1	Shut-off
	56460062	1	Recovery Tank Assy (1-18, 20-31, 49-51 / CR1300 after Aug. 2000)	25	56459131	1	Rod
1	56002491	23	Nut, Hex Nyl Loc SS 1/4-20 (qty of 19 after Aug. 2000)	26	56459136	2	Gasket
2	56002849	1	Nut, Hex Nyl Loc-Thin SS 10-24	27	56459250	1	Tube
3	56002850	2	Nut, Hex Nyl Loc-Thin SS 1/4-20	28	56459253	1	Plug, T-Handle
4			Intentionally Omitted	29	56459254	1	Hose
5	56002958	12	Scr, Pan Phil SS 1/4-20 x 1.25	30	56459816	1	Left Standpipe Weldment
6	56003074	8	Scr, Flt Phil SS 1/4-20 x 1.00	31	56900737	12	Washer, Sealing 1/4
7	56003087	4	Scr, Pan Phil SS 1/4-20 x .88	32	56002859	4	Wsh, Flt SAE SS 1/4 (before Sept. 2000)
8	56009060	14	Wsh, Flt SS .26 x 1.00 x .07	33	56455639	8	Shim (qty approximate, use as required) (before Sept. 2000)
9	56261378	1	Cork Strap	34	56002901	4	Scr, Hex Hd SS 1/4-20 x 1.50 (before Sept. 2000)
10	56385349	1	Float	35	56449221	2	Bumper
11	56386058	1	Hanger	36	56009016	2	Nut, Hex Jam 1/2-13
12	56440213	4	Clamp, Hose SAE #32	37	56455984	2	Gasket, Bulb
13	56454721	1	Weight	38	56459937	1	Hose, Squeegee
14	56454724	1	Rod	39	56459939	1	Hose, Filter Box
15	56455378	1	Plate, Rec Tank	40	56459849	1	Drain & Plate Weldment (before Sept. 2000)
16	56455385	1	Recovery Tank (2052 before Sept. 2000)	41	56009033	4	Scr, Hex Thd Form 1/4-20 x .50 (before Sept. 2000)
	56459948	1	Recovery Tank (CR1300 before Sept. 2000)	42	56459932	1	Stop, Recovery Tank (before Sept. 2000)
	56456002	1	Recovery Tank (2052 after Aug. 2000)	43	56460066	1	Mount, Hinge Left (after Aug. 2000)
	56456012	1	Recovery Tank (CR1300 after Aug. 2000)	*	56460067	1	Mount, Hinge Right (after Aug. 2000)
17	56455386	1	Baffle, Right	44	56002769	8	Nut, Hex Nyl Loc 3/8-16 (after Aug. 2000)
18	56455387	1	Baffle, Left	45	56002063	8	Wsh, Flt SAE 3/8 (after Aug. 2000)
19	56455552	2	Retainer, Tank (before Sept. 2000)	46	56002091	4	Scr, Hex Hd 3/8-16 x 2.00 (after Aug. 2000)
20	56459871	1	Right Standpipe Weldment	47	56460068	1	Hinge Pin Weldt, Left (after Aug. 2000)
21	56455671	1	Cleanout Cap Assembly	*	56460069	1	Hinge Pin Weldt, Right (after Aug. 2000)
*	56455435	1	Gasket, Cleanout Cap	48	56477583	2	Pin, Hair (after Aug. 2000)
*	56455825	1	Outer Ring	49	56455924	1	Left Top Hinge Weld't. (after Aug. 2000)
*	56455826	1	Inner Ring	*	56455976	1	Right Top Hinge Weld't. (after Aug. 2000)
*	56488867	1	O-Ring	*	56455915	2	Gasket (after Aug. 2000)
				*	56455927	2	Stud Plate Weld't. (after Aug. 2000)
				50	56003219	8	Nut, Hex Nyl Loc SS 3/8-16 (after Aug. 2000)
				51	56002910	8	Wsh, Flt SAE SS 3/8 (after Aug. 2000)
				52	56409537	2	Cable Assy (after Aug. 2000)
				53	56001858	4	Scr, Hex 3/8-16 x 1.25 (after Aug. 2000)
				*	56016374	1	Decal, Drain Tank
				*	56016375	1	Decal, Warning Cap Release

* = Not Shown

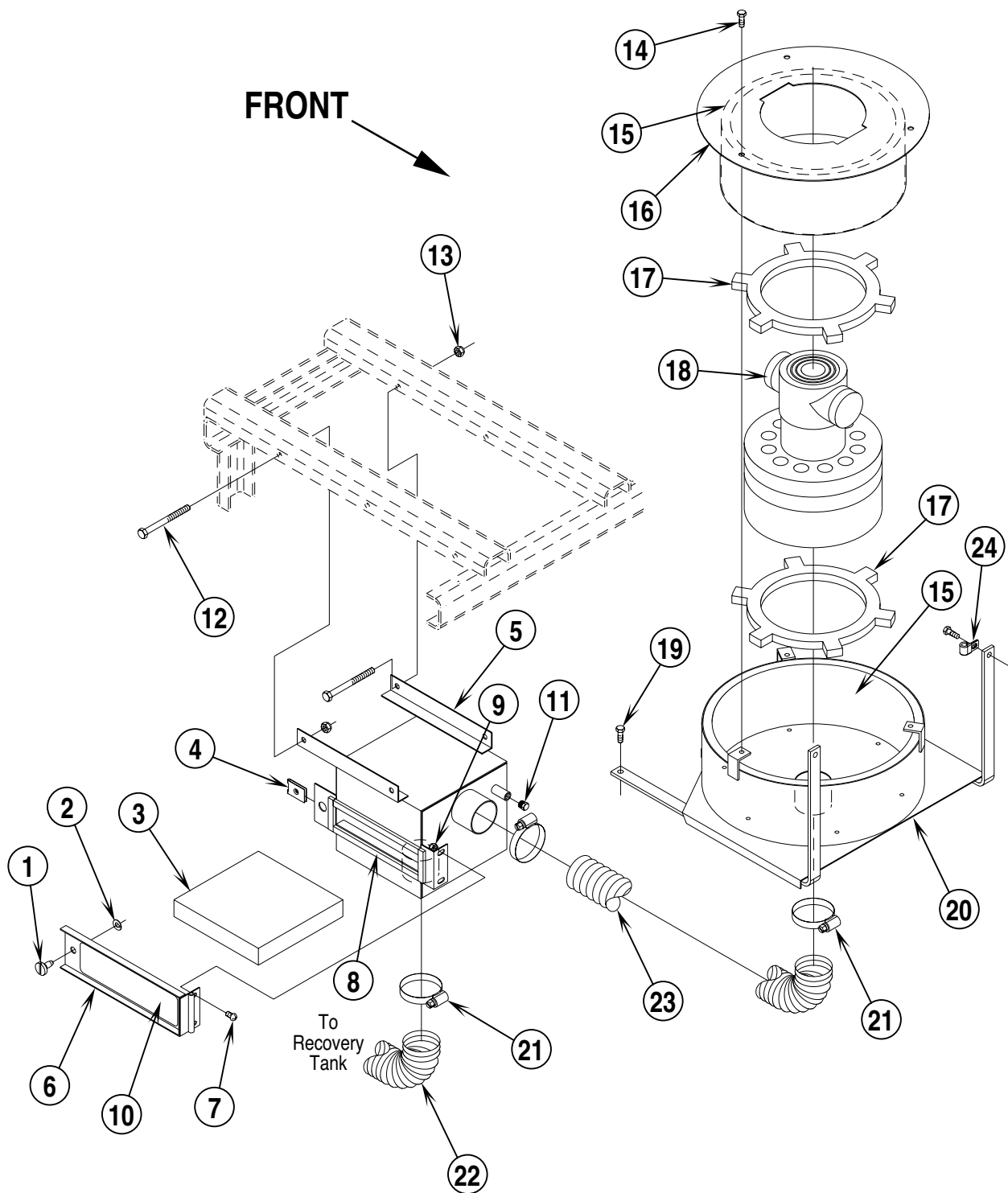
BOOK E			RECOVERY TANK (HYDRO-MAX™ II)	99-4
E	9.9.1	40	Hydro-Retriever™ 2052B / CR 1300B	01-1



99-4	RECOVERY TANK (HYDRO-MAX™ II)	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	41

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
	56459956	1	Hydro-Max™ II Recovery Tank Assy (#1-27)	40	56459939	1	Hose, Filter Box
1	56002062	2	Nut, Cap 1/4-20	41	56459932	1	Stop, Recovery Tank
2	56002152	8	Scr, Rnd Hd Slit Brs 1/4-20 x .50	42	56459254	2	Hose
3	56002378	8	Nut, Hex Brass 1/4-20	43	56459250	2	Tube
4	56002473	2	Nut, Hex Flex Loc 1/4-20	44	56261378	2	Cork Strap
5	56003268	2	Ring, Ret Ext Type E Reinf. .25 Dia.	45	56459253	2	Plug, T-Handle
6	56118117	1	Barb, Adapter 1/2 x 1/2NPT	46	56002768	4	Nut, Hex Nyl Loc #10-24
7	56385349	1	Float	47	56456112	1	Mount, Pump
8	56112771	4	Clamp, Hose	48	56900298	8'	Hose, Spiral .50 (2.43 m)
9	56448104	4	Screw Fastener	49	56261246	2	Elbow
10	56448108	4	Washer, Retainer	50			Intentionally Omitted
11	56454721	3	Weight	51	56459262	1	Pump Assembly
12	56454724	1	Rod	52	56009176	4	Scr, Hex Thd Form 10-24 x 1.00
13	56455389	1	Screen, Panel	53	56001954	4	Wsh, Flt SAE #10
14	56455723	1	Tank Weldment	54	56002840	6	Nut, Hex Nyl Loc-Thin 1/4-20
15	56459130	1	Shutoff	55	56002098	4	Wsh, Flt SAE 1/4
16	56459131	1	Rod	56	56152781	A/R	Spacer
17	56459259	1	Switch Assembly (#58-72)	57	56455741	2	Corner Bracket
18	56459302	2	Cover	58	56002836	4	Nut, Hex Nyl Loc SS 10-24
19	56459303	2	Gasket, Door	59	56002900	4	Scr, Pan Phil SS 10-24 x .50
20	56459312	2	Plate	60	56003268	2	Ring, Ret Ext Type E Reinf. .25 Dia
21	56459321	1	Strainer	61	56219894	3	Wire, 18 Ga Black
22	56462072	1	Connector, Male	62	56387558	1	Insulator Tube .31
23	56468960	4	Screw, Receptacle	63	56388167	2	Switch, Encl. Mercury
24	56460009	1	Sleeve Assembly	64	56409695	3	Splice, Parallel
*	56460013	1	Sleeve Weldment	65	56455846	3	Tubing, Heatshrink
*	56490112	8"	Gasket (20.32 cm)	66	56456023	1	Float, Foam
25	56742125	1	Elbow, 90 Street	67	56456027	1	Strain Relief
26	56755258	1	Nipple, 1/4-18	68	56459264	3	Terminal, Weather Pack, Male
27	56900298	36"	Hose, Spiral .50 (91.44 cm)	69	56459320	1	Rod Weldment
28	56016644	2	Decal, 2052	70	56462074	3	Seal, Weather Pack
	56016645	2	Decal, CR 1300	71	56478246	1	Tie, Cable
29	56386058	2	Hanger	72	56900680	2	Conduit
30	56003087	4	Scr, Pan Phil SS 1/4-20 x .88	* = Not Shown			
31	56455378	1	Plate, Recovery Tank				
32	56003074	8	Scr, Flt Phil SS 1/4-20 x 1.00				
33	56459112	2	Gasket, Bulb				
34	56459915	1	Plate, Tank Adjustment				
35	56449221	2	Bumper				
36	56009016	2	Nut, Hex Jam 1/2-13				
37	56440213	4	Clamp, Hose SAE #32				
38	56459937	1	Hose, Squeegee				
39	56009033	8	Scr, Hex Thd Form 1/4-20 x .50				

BOOK E			VACUUM SYSTEM	99-4
E	9.9.1	42	Hydro-Retriever™ 2052B / CR 1300B	01-1

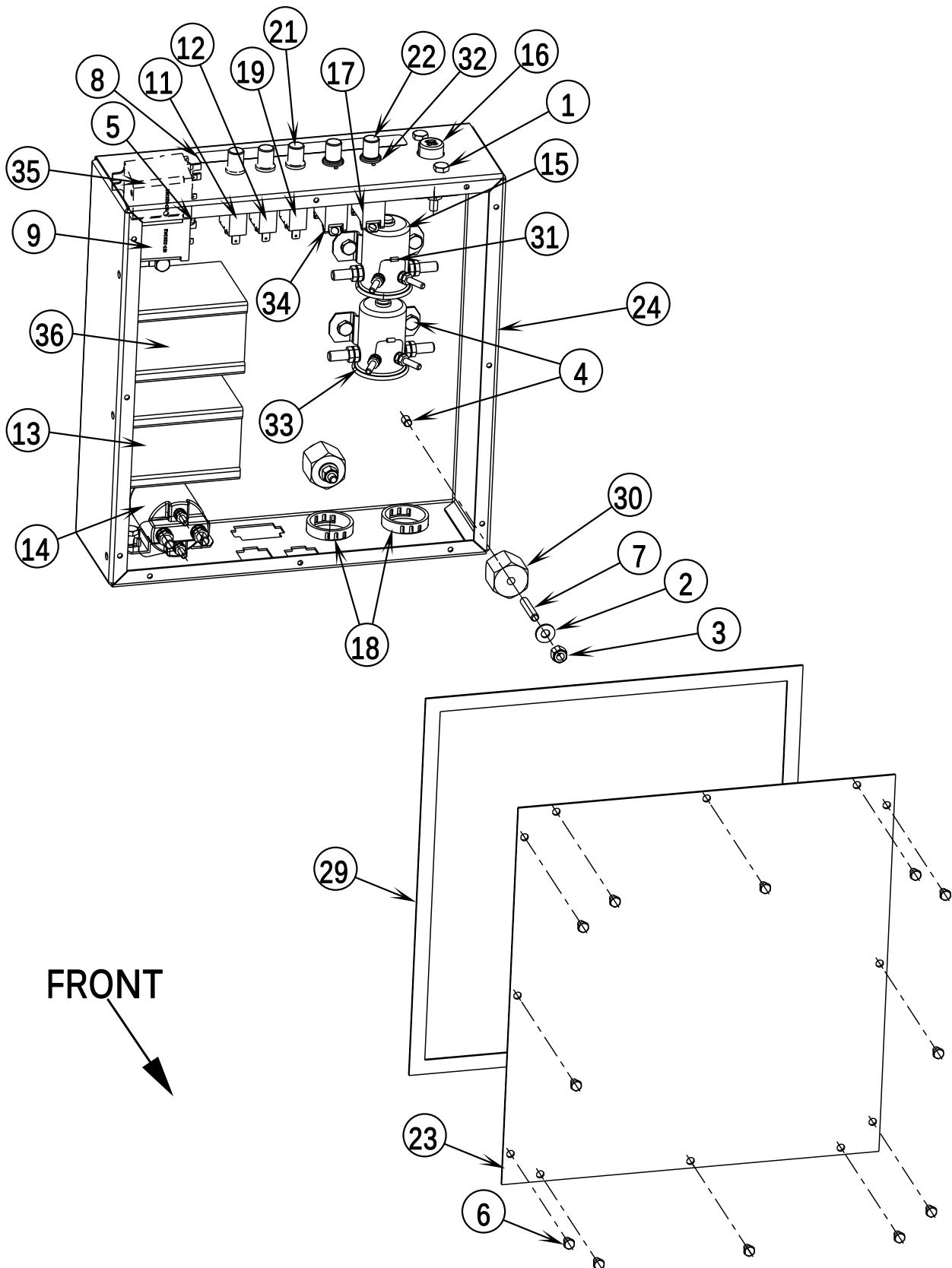


99-4	VACUUM SYSTEM	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	43

Item	Ref. No.	Qty	Description
	56454360	1	Filter Box Assembly (#1-9)
1	56448104	1	Screw Fastener
2	56448108	1	Retaining Washer
3	56454259	1	Filter
4	56468960	1	Screw Receptacle
5	56454350	1	Filter Box
6	56454370	1	Door
7	56002043	2	Scr, Pan Phil 10-24 x .38
8	56459891	1	Gasket
9	56002832	2	Nut, Hex Nyl Loc 10-24
10	56014879	1	Decal, Filter
11	56481546	1	Plug, Hex Pipe
12	56002203	4	Scr, Hex Hd 5/16-18 x 2.75
13	56002701	4	Nut, Hex Nyl Loc 5/16-18
	56452189	1	Motor Housing Assembly (#14-18 & 20)
14	56002948	3	Scr, Hex Hd Loc 1/4-20 x .75
15	56454333	2	Foam, 1/2 x 4 x 36
16	56454330	1	Baffle Weldment
17	56200379	2	Gasket, Motor
18	56454206	1	Vacuum Motor
*	56454208	1	Carbon Brush Set
19	56009033	4	Scr, Hex Thd Form 1/4-20 x .50
20	56454340	1	Mount Weldment
21	56440213	3	Clamp, Hose SAE #32
22	56459939	1	Hose
23	56459938	1	Hose
24	56323260	1	Cord Clamp

* = Not Shown

BOOK E			LEFT ELECTRICAL PANEL	99-4
E	9.9.1	44	Hydro-Retriever™ 2052B / CR 1300B	03-3

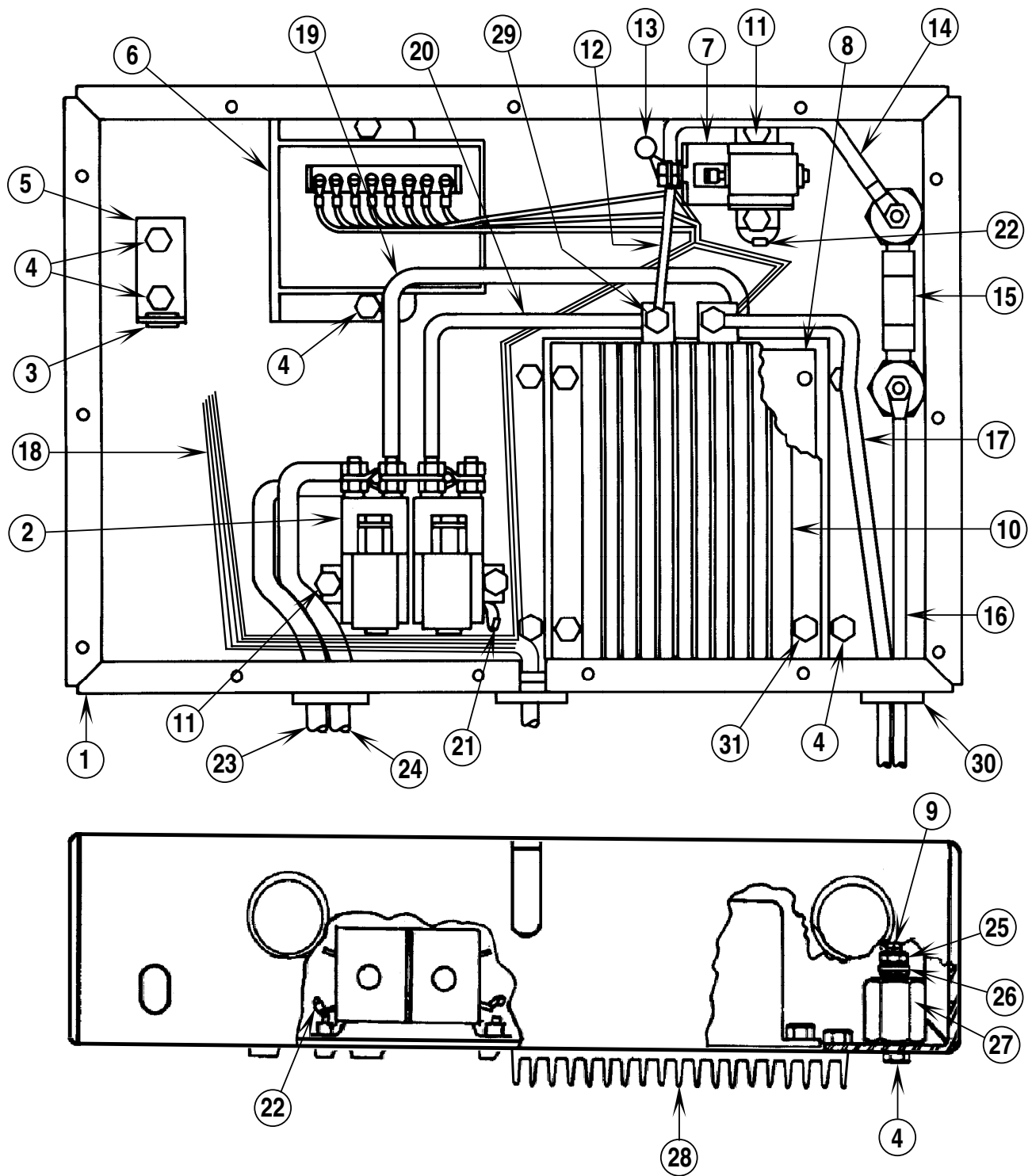


99-4	LEFT ELECTRICAL PANEL	BOOK E		
04-5	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	45

Item	Ref. No.	Qty	Description
	56459840	1	Left Electrical Panel Assembly
1	56001821	2	Scr,Hex Hd 1/4-20x.88
2	56002098	4	Wsh, Flt Sae 1/4
3	56002708	4	Nut, Hex Nyl Loc 1/4-20
4	56002933	1	Scr,Hex Hd Loc 1/4-20x.38
5	56009032	4	Scr, Hex Thd Form 6-32 X .38
6	56009063	1	Scr, Hex Thd Form 10-24 X .25
7	56009203	2	Stud, 1/4-20
8	560016241	1	Decal,Circuit Breaker
9	56460098	1	Relay (Low Voltage Cut-Out / K9) TSBUS2003-843, TSBUS2004-853
10	56261238	1	Wire Rectifier Assy (Not Shown)
11	56387316	1	Circuit Breaker, 10 Amp (Aux. 2 / F7)
12	56387328	1	Circuit Breaker, 5 Amp (Drive Control Circuit / F5)
13	56392175	1	Dual Control Assy (Side Skirt Actuator Control / E4 & E5)
14	56395450	1	Contactor 36v (Brush Motor / K5)
15	56395452	1	Solenoid, 36v (Broom Motor / K6)
16	56409230	1	Circuit Breaker,80 Amp (Brush Motor / F1)
17	56452193	1	Circuit Breaker,40 Amp (Vac Motor / F2)
18	56452274	2	Bushing, Snap
19	56454538	1	Circuit Breaker, 15 Amp (Aux. 1 / F4)
20	56459329	1	Left Panel Harness TSBUS2003-853
	56460097	1	Left Panel Harness TSBUS2003-853
21	56459367	3	Boot, Reset Button
22	56459368	2	Boot, Reset Button
23	56459784	1	Cover,Electrical Tray
24	56459839	1	Tray, Electrical
25	56459843	1	Cable Assy (Not Shown)
26	56459844	1	Cable Assy (Not Shown)
27	56459845	1	Cable Assy (Not Shown)
28	56459846	1	Cable Assy (Not Shown)
29	56459892	1	Gasket, 1/16 X 1/2, 52in.
30	56469858	2	Standoff, Insulated
31	56459819	3	Diode Assembly TSBUS2003-843
32	56744660	2	Washer Sealing .375
33	56395452	1	Solenoid, 36V (Vac Motor / K7)
34	56452193	1	Circuit Breaker,40 Amp (Broom Motor / F3)
35	56261219	1	Relay (Recycle Pump, Hydro-Max II / K4)
36	56392175	1	Dual Control Assembly (Brush & Squeegee Lift Actuator Control / E1 & E2)
*	56459835	1	Harness, Left Panel (2052 before SN1297858)
*	56459329	1	Harness, Left panel (2052 after SN1297857 / all CR 1300)

* = Not Shown

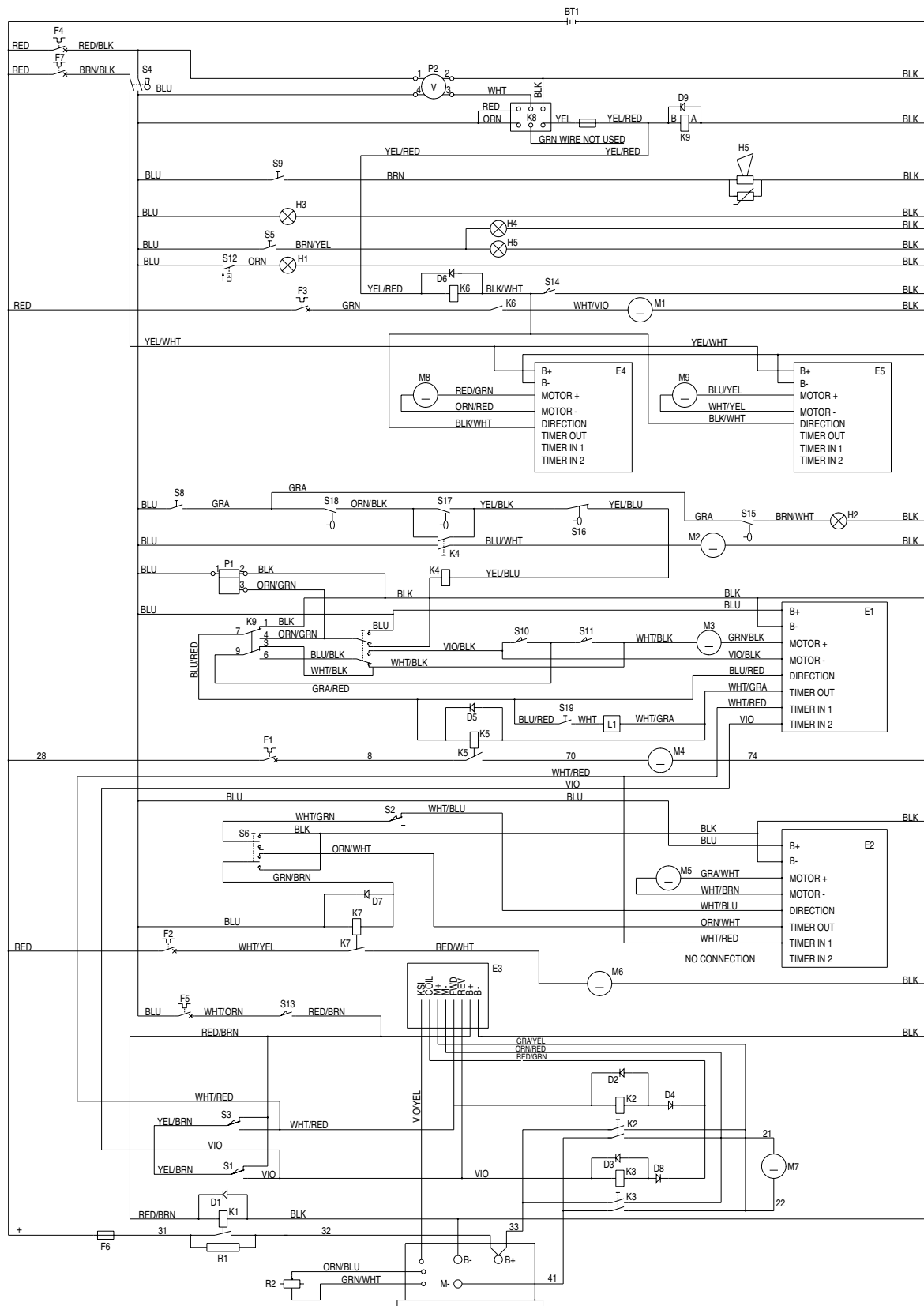
BOOK E			RIGHT ELECTRICAL PANEL	99-4
E	9.9.1	46	Hydro-Retriever™ 2052B / CR 1300B	01-1



99-4	RIGHT ELECTRICAL PANEL	BOOK E		
01-1	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	47

Item	Ref. No.	Qty	Description
	56452279	1	Right Electrical Panel Assembly (#1-26)
1	56452276	1	Controller Tray
2	56454705	1	Contactor 36VDC (Forward/Reverse / K2 & K3)
3	56329098	1	Bushing Nylon
4	56009019	10	Scr, Hex Thd Form 1/4-20 x .38
5	56452154	1	Angle
6	56454804	1	Forward / Reverse Interlock (E3)
7	56454806	1	Contactor SPST (Main / K1) TSB 728
8	56452176	1	Thermol Pad
9	56009020	2	Stud
10	56454803	1	Speed Control
11	56009039	4	Scr, Hex Thd Form 10-24 x .50
12	56452205	1	Cable Assembly
13	56454696	1	Resistor / Diode Assembly (R1) TSB 728
14	56452206	1	Cable Assembly
15	56479108	1	Fuse, 200 Amp (Wheel Drive Motor / F6)
16	56452268	1	Cable Assembly
17	56452267	1	Cable Assembly
18	56452263	1	Panel Wiring Harness, Right
19	56452208	1	Cable Assembly
20	56452207	1	Cable Assembly
21	56454813	2	Diode Assembly
22	56454812	3	Diode Assembly
23	56452203	1	Cable Assembly
24	56452202	1	Cable Assembly
25	56002840	4	Nut, Hex Nyl Loc-Thin 1/4-20
26	56009064	2	Washer, Int Shprf 1/4
27	56469858	2	Insulated Standoff
28	56452152	1	Heat Sink
29	56002035	3	Scr, Hex 5/16-18 x .62
*	56002826	3	Nut, Hex Nyl Loc-Thin 5/16-18
30	56452274	2	Bushing, Snap
31	56009033	4	Scr, Hex Thd Form 1/4-20 x .50
*	56459951	1	Cover, Electrical Enclosure
*	56200754	61"	Gasket

* = Not Shown



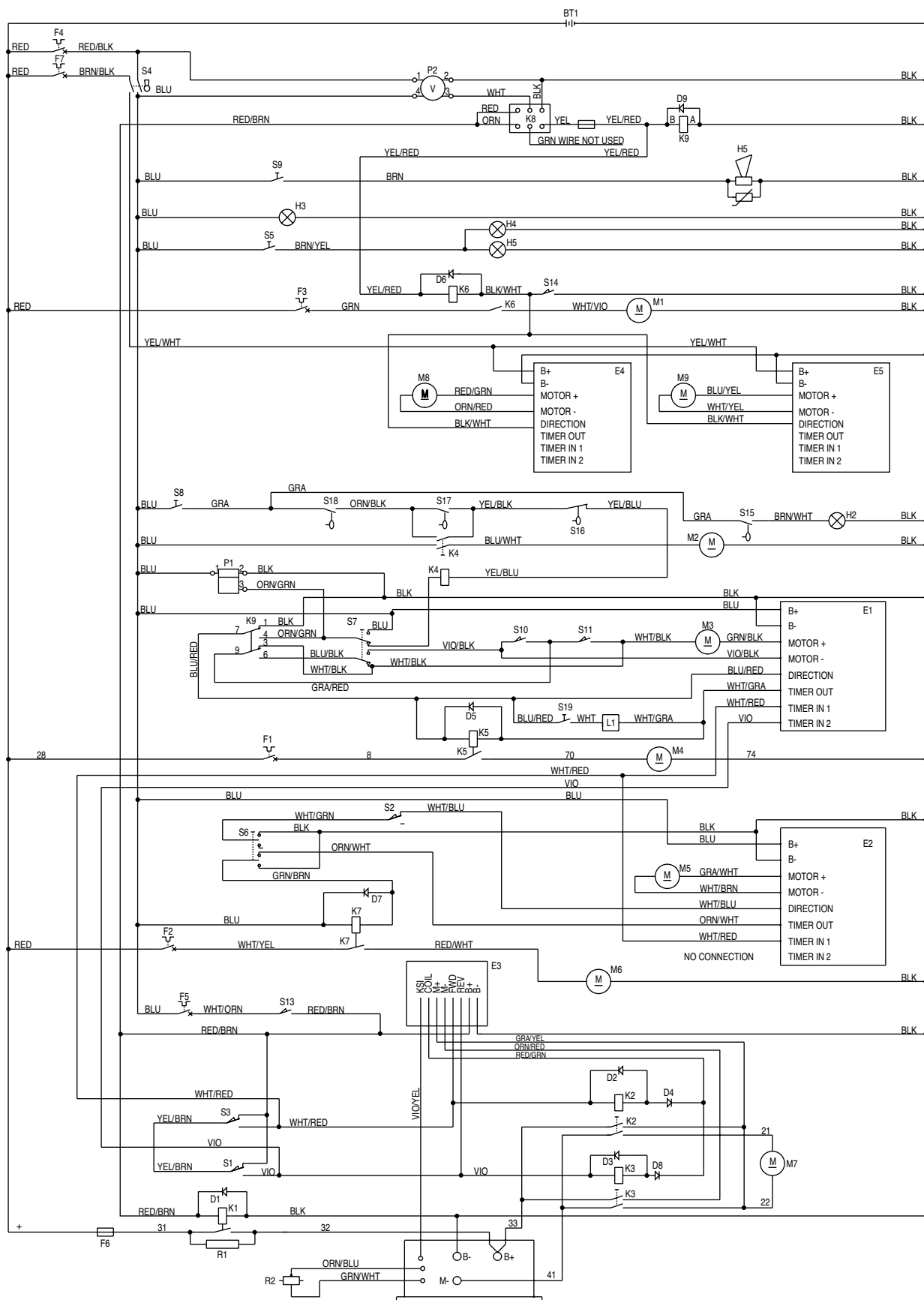
99-4	ELECTRICAL DIAGRAM (2052 BEFORE SN1297858)	BOOK E		
04-5	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	49

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
A1	56454803	1	Speed Controller	M1	56454457	1	Broom Motor
BT1	N/A	1	Battery, 36 V WARNING!	*	56468382	1	Carbon Brush Set
D1	56454812	1	Suppression Diode	M2	N/A	1	Recycle Pump Motor
D2	56454812	1	Suppression Diode				(Hydro-Max™II)
D3	56454812	1	Suppression Diode	M3	56452185	1	Brush Lift Actuator
D4	56454813	1	Blocking Diode	M4	56409825	1	Brush Motor
D5	56459819	1	Suppression Diode TSBUS2003-843	M5	56391627	1	Squeegee Lift Actuator
D6	56459819	1	Suppression Diode	*	56388520	1	Replacement Plastic Nut
D7	56459819	1	Suppression Diode	*	56470431	1	Carbon Brush Set
D8	56454813	1	Blocking Diode	M6	56454206	1	Vacuum Motor
D9		1	Suppression Diode	M7	56454484	1	Wheel Drive Motor
E1	56392175	1	Brush Lift Actuator Control Module	*	56454485	1	Carbon Brush (set of 8)
E2	56392175	1	Squeegee Lift Actuator Control Module	M8	56391627	1	Left Side Skirt Lift Actuator
E3	56454804	1	Forward / Reverse Interlock	*	56388520	1	Replacement Plastic Nut
E4	56392175	1	Left Side Skirt Lift Actuator Control Module	*	56470431	1	Carbon Brush Set
E5	56392175	1	Right Side Skirt Lift Actuator Control Module	M9	56391627	1	Right Side Skirt Lift Actuator
F1	56409230	1	Brush Motor Circuit Breaker (80A)	*	56388520	1	Replacement Plastic Nut
F2	56452193	1	Vacuum Motor Circuit Breaker (40A)	*	56470431	1	Carbon Brush Set
F3	56452193	1	Broom Motor Circuit Breaker (40A)	P1	56393718	1	Hourmeter
F4	56454538	1	Auxiliary Circuit 1 Circuit Breaker (15A)	P2	56416395	1	Fuel Gauge, Battery
F5	56387328	1	Drive Control Circuit Circuit Breaker (5A)	R1	56454807	1	Resistor 250 Ohm, 5 Watt
F6	56479108	1	Wheel Drive Motor Fuse (200A)	R2	56452142	1	Throttle Potentiometer 10K Ohm
F7	56387316	1	Auxiliary Circuit 2 Circuit Breaker (10A)	S1	56452144	1	Reverse Throttle Switch
F8		1	Fuse (1.5A)	S2	56452144	1	Reverse Squeegee Lift Switch
H1	N/A	1	Recovery Tank Full Light	S3	56452144	1	Forward Throttle Switch
H2	N/A	1	Detergent Tank Empty Light	S4	56301636	1	Key Switch
			(Hydro-Max™II)	S5	56376348	1	Headlight Switch
H3	56416433	1	Strobe Light	S6	56261245	1	Vacuum / Squeegee Switch
*	56416435	1	Lens, Amber (for 56416433)	S7	56377003	1	Brush Switch
*	56416436	1	Flash Tube (for 56416433)	S8	N/A	1	Recycle Pump Switch
H4	56416168	1	Left Headlight				(Hydro-Max™II)
	56482642	1	Replacement Bulb (for 56416168)	S9	56441555	1	Horn Switch
H5	56416168	1	Right Headlight	S10	56452290	1	Brush Lift UP Limit Switch
	56482642	1	Replacement Bulb (for 56416168)	S11	56452290	1	Brush Lift DOWN Limit Switch
H6	56482365	1	Horn	S12	N/A	1	Vacuum Pressure Switch
K1	56454806	1	Main Contactor	S13	56457364	1	Seat Switch
K2	56454705	1	Forward Direction Contactor	S14	56388019	1	Broom Switch
K3	56454705	1	Reverse Direction Contactor	S15	N/A	1	Detergent Tank Float Switch
K4	N/A	1	Recycle Pump Relay (Hydro-Max™II)				(Hydro-Max™II)
K5	56395450	1	Brush Motor Contactor TSBUS2003-843	S16	N/A	1	Solution Tank Float Switch
K6	56395452	1	Broom Motor Contactor				(Hydro-Max™II)
K7	56395452	1	Vacuum Motor Contactor	S17	N/A	1	Recovery Tank Start Float Switch
K8	56416396	1	Low Voltage Cut-Out Module				(Hydro-Max™II)
K9	56460098	1	Low Voltage Cut-Out Relay	S18	N/A	1	Recovery Tank Stop Float Switch
			TSBUS2003-843, TSBUS2004-853				(Hydro-Max™II)
L1	56459625	1	Solution Solenoid	S19	56376348	1	Solution Switch
				*	56452271	1	Battery Connector
				*	56452833	1	Main Wiring Harness

* = Not Shown

** = Optional

NOTE: The Hydro-Max™ II option was not available at time of printing.**WARNING!** Battery weight in excess of 1,475 pounds (669 Kg.) may cause the premature failure of parts including the tires, and may result in decreased stability and control, which could cause personal injury or death and/or property damage. Use of a battery in excess of the weight limit will void the warranty.



99-4	ELECT. DIAGRAM (2052 AFTER SN1297857 / ALL CR1300)	BOOK E		
04-5	Hydro-Retriever™ 2052B / CR 1300B	E	9.9.1	51

Item	Ref. No.	Qty	Description	Item	Ref. No.	Qty	Description
A1	56454803	1	Speed Controller	M1	56454457	1	Broom Motor
BT1	N/A	1	Battery, 36 V WARNING!	*	56468382	1	Carbon Brush Set
D1	56454812	1	Suppression Diode	M2	56459324	1	Recycle Pump Motor
D2	56454812	1	Suppression Diode				(Hydro-Max™II)
D3	56454812	1	Suppression Diode	M3	56452185	1	Brush Lift Actuator
D4	56454813	1	Blocking Diode	M4	56409825	1	Brush Motor
D5	56459819	1	Suppression Diode TSBUS2003-843	M5	56391627	1	Squeegee Lift Actuator
D6	56459819	1	Suppression Diode	*	56388520	1	Replacement Plastic Nut
D7	56459819	1	Suppression Diode	*	56470431	1	Carbon Brush Set
D8	56454813	1	Blocking Diode	M6	56454206	1	Vacuum Motor
D9		1	Suppression Diode	M7	56454484	1	Wheel Drive Motor
E1	56392175	1	Brush Lift Actuator Control Module	*	56454485	1	Carbon Brush (set of 8)
E2	56392175	1	Squeegee Lift Actuator Control Module	M8	56391627	1	Left Side Skirt Lift Actuator
E3	56454804	1	Forward / Reverse Interlock	*	56388520	1	Replacement Plastic Nut
E4	56392175	1	Left Side Skirt Lift Actuator Control Module	*	56470431	1	Carbon Brush Set
E5	56392175	1	Right Side Skirt Lift Actuator Control Module	M9	56391627	1	Right Side Skirt Lift Actuator
F1	56409230	1	Brush Motor Circuit Breaker (80A)	*	56388520	1	Replacement Plastic Nut
F2	56452193	1	Vacuum Motor Circuit Breaker (40A)	*	56470431	1	Carbon Brush Set
F3	56452193	1	Broom Motor Circuit Breaker (40A)	P1	56393718	1	Hourmeter
F4	56454538	1	Auxilliary Circuit 1 Circuit Breaker (15A)	P2	56416395	1	Fuel Gauge, Battery
F5	56387328	1	Drive Control Circuit Circuit Breaker (5A)	R1	56454696	1	Resistor / Diode Assy TSB 728
F6	56479108	1	Wheel Drive Motor Fuse (200A)	R2	56452142	1	Throttle Potentiometer 10K Ohm
F7	56387316	1	Auxilliary Circuit 2 Circuit Breaker (10A)	S1	56452144	1	Reverse Throttle Switch
F8		1	Fuse (1.5A)	S2	56452144	1	Reverse Squeegee Lift Switch
H2	56452260	1	Detergent Tank Empty Light	S3	56452144	1	Forward Throttle Switch
			(Hydro-Max™II)	S4	56301636	1	Key Switch
H3	56416433	1	Strobe Light	S5	56376348	1	Headlight Switch
*	56416435	1	Lens, Amber (for 56416433)	S6	56261245	1	Vacuum / Squeegee Switch
*	56416436	1	Flash Tube (for 56416433)	S7	56377003	1	Brush Switch
H4	56416168	1	Left Headlight	S8	56262551	1	Recycle Pump Switch
	56482642	1	Replacement Bulb (for 56416168)				(Hydro-Max™II)
H5	56416168	1	Right Headlight	S9	56441555	1	Horn Switch
	56482642	1	Replacement Bulb (for 56416168)	S10	56452290	1	Brush Lift UP Limit Switch
H6	56482365	1	Horn	S11	56452290	1	Brush Lift DOWN Limit Switch
K1	56454806	1	Main Contactor TSB 728	S13	56457364	1	Seat Switch
K2	56454705	1	Forward Direction Contactor	S14	56388019	1	Broom Switch
K3	56454705	1	Reverse Direction Contactor	S15	56460015	1	Detergent Tank Float Switch
K4	56261219	1	Recycle Pump Relay (Hydro-Max™II)				(Hydro-Max™II)
K5	56395450	1	Brush Motor Contactor TSBUS2003-843	S16	56459260	1	Solution Tank Float Switch
K6	56395452	1	Broom Motor Contactor				(Hydro-Max™II)
K7	56395452	1	Vacuum Motor Contactor	S17	56388167	1	Recovery Tank Start Float Switch
K8	56416396	1	Low Voltage Cut-Out Module				(Hydro-Max™II)
K9	56460098	1	Low Voltage Cut-Out Relay	S18	56388167	1	Recovery Tank Stop Float Switch
			TSBUS2003-843, TSBUS2004-853				(Hydro-Max™II)
L1	56459625	1	Solution Solenoid	S19	56376348	1	Solution Switch
				*	56452271	1	Battery Connector
				*	56459327	1	Main Wiring Harness
				*	56459950	1	Seat Switch Wiring Harness

* = Not Shown

** = Optional

WARNING! Battery weight in excess of 1,475 pounds (669 Kg.) may cause the premature failure of parts including the tires, and may result in decreased stability and control, which could cause personal injury or death and/or property damage. Use of a battery in excess of the weight limit will void the warranty.

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