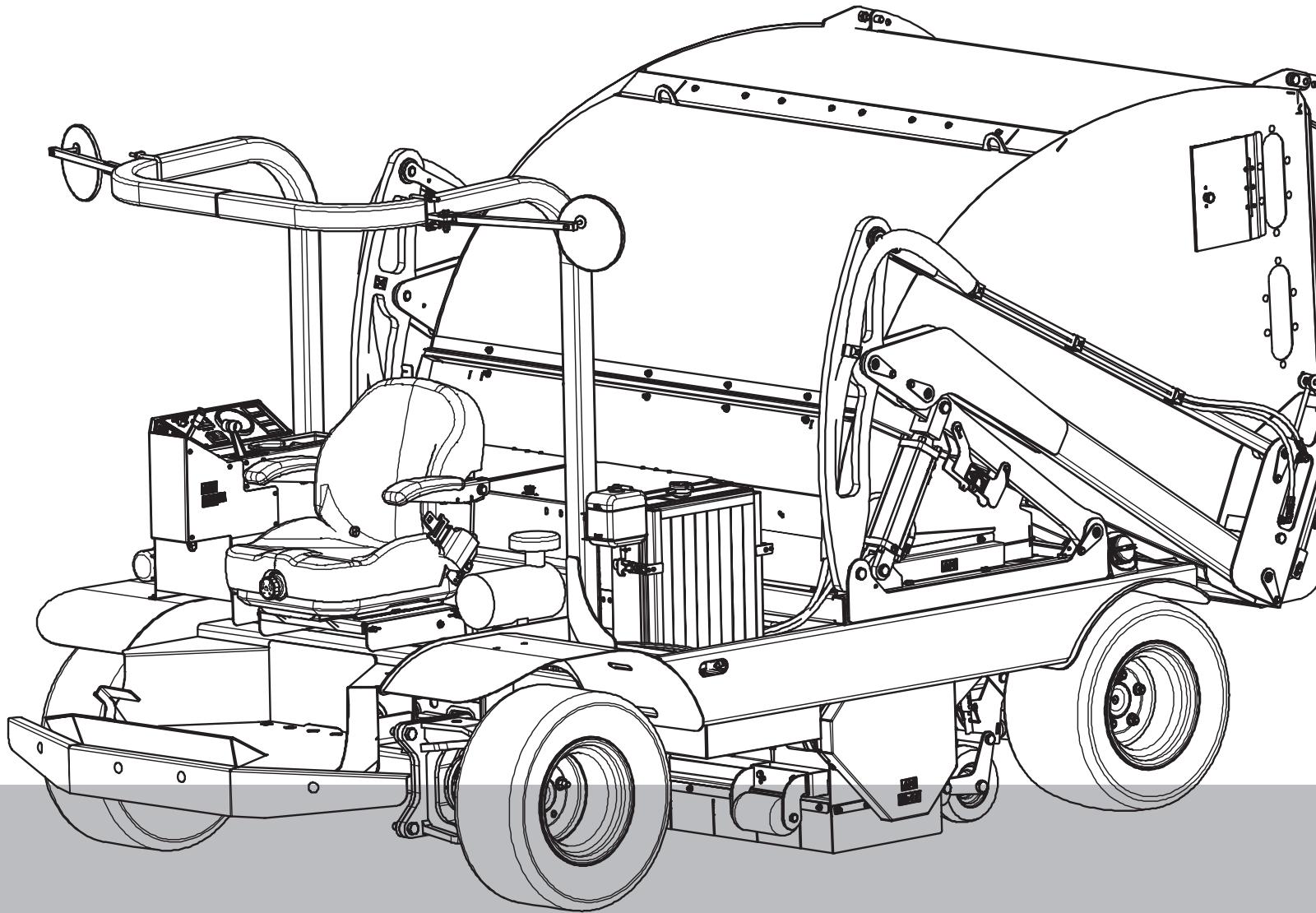


HK 4400

Serial Number: 20A05 & Below
Part # 301011



HARPER HAWK PARTS MANUAL

Thank you for purchasing a Harper Hawk.

As with all Harper products, the Harper Hawk has been developed through tough design and testing procedures to produce a top-quality machine. This manual gives assembly, operating, and service information for the model HK4400 Sweeper. Please read and understand all instructional material included with the Sweeper or its components before assembling and operating the equipment.

A Sweeper can present hazards to an operator who follows unsafe procedures in either the operation or maintenance of the unit. Therefore, **SAFETY WARNINGS** are presented at certain locations in the text.



THIS SYMBOL:



SAFETY WARNING!

MEANING: Failure to understand and obey this warning may result in injury to you or others. Whenever this symbol is used, please pay very close attention to the information presented, and make sure you fully understand. If you do not, contact your dealer or Harper Industries, Inc. for clarification.



SAFETY WARNING!



ALL SHIELDS AND GUARDS MUST BE IN PLACE FOR PROPER AND SAFE OPERATION OF THIS EQUIPMENT. WHERE THEY ARE SHOWN REMOVED IN THIS MANUAL, IT IS FOR PURPOSES OF ILLUSTRATION AND INSTRUCTION ONLY. DO NOT OPERATE THIS EQUIPMENT UNLESS ALL SHIELDS AND GUARDS ARE IN PLACE.



WARNING: Breathing diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov/diesel

Harper Industries, Inc. is continually striving to improve the design and performance of its products. We reserve the right to make changes in specifications and design without thereby incurring any obligation relative to previously manufactured products.

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HK4400

HARPER
TURF EQUIPMENT

LIMITED WARRANTY

Harper Industries, Inc. (HII) warrants to each purchaser of a new Harper Hawk from an authorized dealer or representative, that such equipment is free of manufacturer's defects in workmanship and materials which appear while in normal service for a period of ONE YEAR commencing with delivery to the original user.

The obligation of HII under this warranty is expressly limited, at our option, to replacement or repair at a service facility designated by Harper Industries or at the manufacturing plant in Harper, KS. A part will be replaced after inspection discloses it to have been defective. This warranty does not apply to defects caused by damage or unreasonable use (including failure to provide reasonable and necessary maintenance, or by performing functions without genuine Harper Turf Sweeper accessories) while in the possession of the consumer.

Warranty is limited to parts, labor and ground freight delivery of replacement parts. HII shall not be liable for the consequential damages of any kind, including but not limited to consequential labor costs or transportation charges in connection with replacement or repair of defective parts.

This warranty does not apply to parts subjected to misuse, abuse, alteration, improper or inadequate maintenance, or normal wear (including belts, battery, chains, filters, knives, brush and broom).

Engines are not covered under this warranty. Refer to manufacturer's warranty for specific warranty information. Harper Industries, its agents or representatives, make or imply no other warranties.

Harper Industries makes no warranty with respect to trade accessories. They are subject to the warranties of their respective manufacturers.

ANY IMPLIED OR STATUTORY WARRANTIES, INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. HII makes no other express warranty, nor is anyone authorized to make any on behalf of HII.

For further information please contact your nearest Harper Turf Sweeper dealer.

RECORDS

Date of Purchase _____ / _____ / _____

Dealer's Name _____

Dealer's Phone _____

Serial Number Machine _____

Serial Number Engine _____

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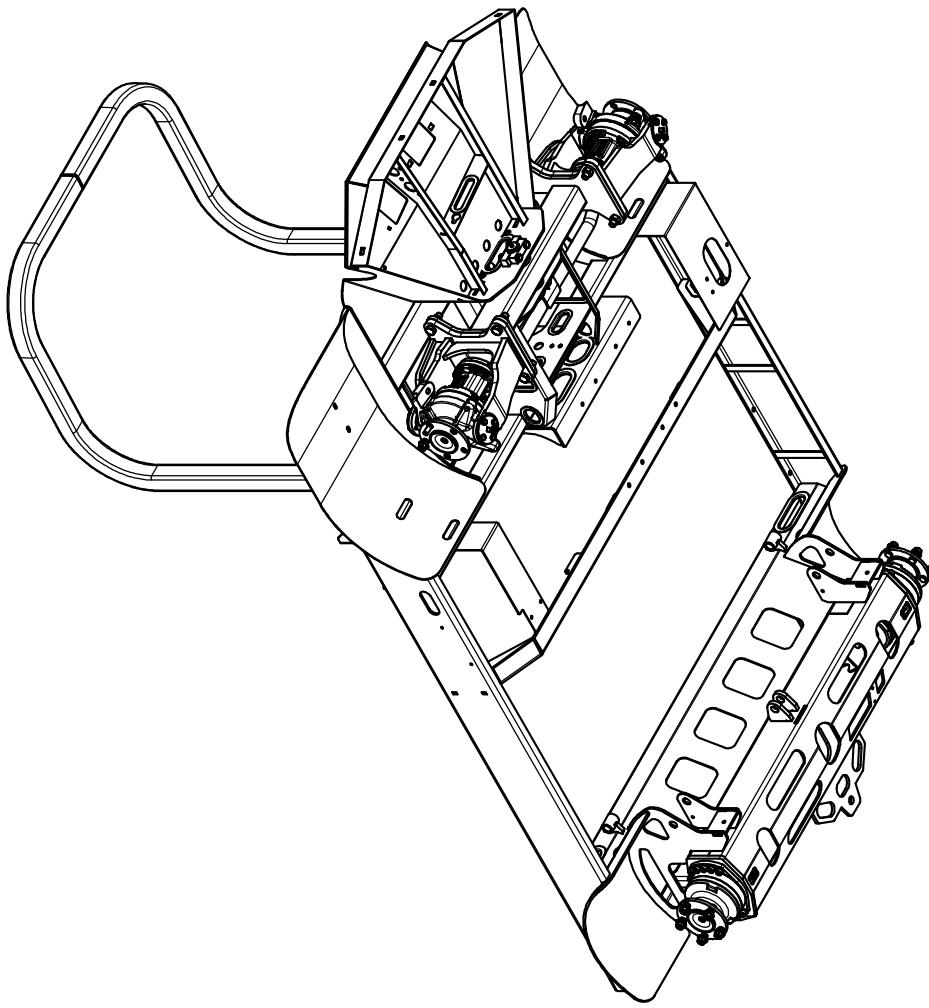
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WHEEL MOTOR & AXLE INSTALLATION

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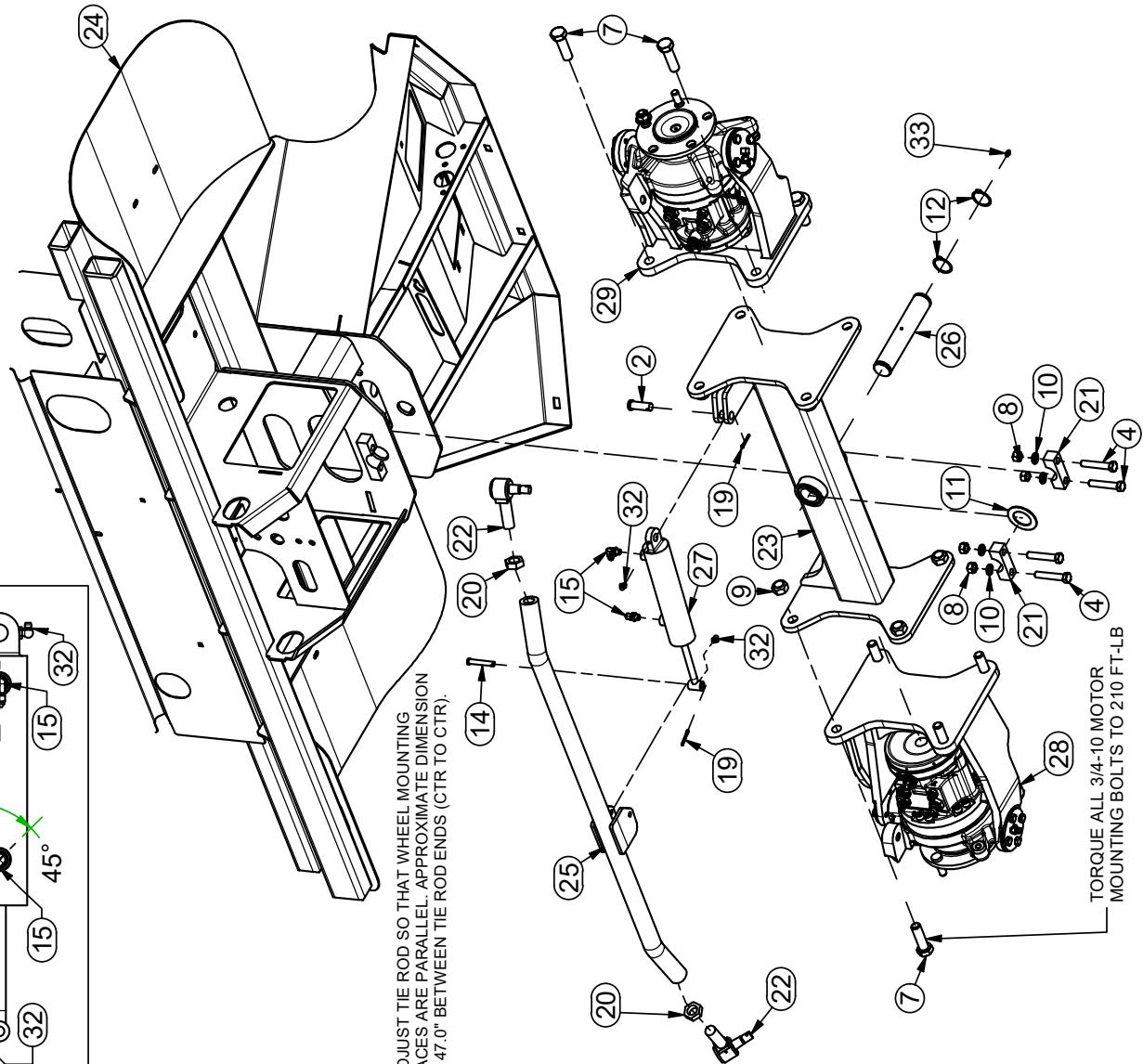
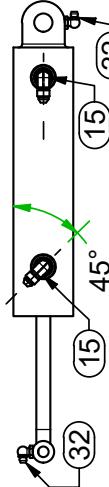


Parts List

ITEM	QTY	PART #	DESCRIPTION
1	10'	100365	MOLDING - EDGE GUARD, 5/32
2	1	102136	Clevis Pin, 5/8 X 1.5
3	2	110053	Hex Nut M12 X 1.75 Thd
4	4	110129	BOLT, 1/2-13 X 2.75 HEX
5	20	110244	BOLT, 1/2-13 X 1.5 SHCS
6	2	110347	BOLT, M12X1.75 X 25 GR 10.9
7	8	110454	BOLT, 3/4-10 X 2.5
8	4	110610	NUT, 1/2-13
9	8	110625	NUT, 3/4-10, UNI TORQUE LOCK
10	24	110666	WASHER, 1/2" LOCK
11	1	110862	WASHER - THRUST, (GUS MTI)-24
12	2	110888	SNAP RING - EXT, 1-1/2
13	13'	112084	Rubber Seal, .625 X 25
14	1	112135	Clevis Pin, 3/8" x 2", Zinc-Plated Steel
15	2	120235	ADAPTER, 4MJ-4MB90
16	10	120249	ADAPTER, 4MJ-6MB
17	8	120446	ADAPTER, 8MJ-10MB
18	2	120732	ADAPTER, 4MJ-6MB 45
19	2	200029	COTTER PIN, 5/32 X 1
20	2	302129	NUT, 7/8-18 HEX JAM GR 2
21	2	311459	KEEPER - AXLE PIVOT, LOWER
22	2	312032	Tie Rod End, RH
23	1	315338	WELDMENT, FRONT AXLE
24	1	315350	FRAME WELDMENT, SWEEPER
25	1	315367	WELDMENT, ROUND STEERING LINK
26	1	317174	PIN, FRONT AXLE
27	1	323010	CYLINDER - STEERING, 1-3/4 X 6
28	1	323055	MOTOR, LH FRONT WHEEL, 24.3 CI, 2-SPD
29	1	323056	MOTOR, RH FRONT WHEEL, 24.3 CI, 2-SPD
30	1	323057	MOTOR, LH REAR WHEEL, 24.3 CI, 2-SPD
31	1	323058	MOTOR, RH REAR WHEEL, 24.3 CI, 2-SPD
32	2	500230	GREASE ZERK, 1/4-28 90deg
33	1	510174	GREASE ZERK, 1/4-28 ST

FRONT AXLE INSTALLATION

STEERING CYLINDER ADAPTER & ZERK ORIENTATION



Parts List

ITEM	QTY	PART #	DESCRIPTION
2	1	102136	Clevis Pin, 5/8 x 1.5
3	2	110053	Hex Nut M12 X 1.75 Thd
4	4	110129	BOLT, 1/2-13 X 2.75 HEX
6	2	110347	BOLT, M12x1.75 x 25 Gr 10.9
7	8	110454	BOLT, 3/4-10 X 2.5
8	4	110610	NUT, 1/2-13
9	8	110625	NUT, 3/4-10, UNI TORQUE LOCK
10	24	110666	WASHER, 1/2" LOCK
11	1	110862	WASHER - THRUST, IGUS MTI-24
12	2	110888	SNAP RING - EXT, 1-1/2
14	1	112135	Clevis Pin, 3/8" x 2", Zinc-Plated Steel
15	2	120235	ADAPTER, 4MJ-4MB90
16	10	120249	ADAPTER, 4MJ-6MB
17	8	120446	ADAPTER, 8MJ-10MB
18	2	120732	ADAPTER, 4MJ-6MB 45
19	2	200029	COTTER PIN, 5/32 X 1
20	2	302129	NUT, 7/8-18 HEX JAM GR 2
21	2	311459	KEEPER - AXLE PIVOT, LOWER
22	2	312032	Tie Rod End, RH
23	1	315338	WELDMENT, FRONT AXLE
24	1	315350	FRAME WELDMENT, SWEEPER
25	1	315367	WELDMENT, ROUND STEERING LINK
26	1	317174	PIN, FRONT AXLE
27	1	323010	CYLINDER - STEERING, 1-3/4 X 6
28	1	323055	MOTOR, LH FRONT WHEEL, 24.3 CI, 2-SPD
29	1	323056	MOTOR, RH FRONT WHEEL, 24.3 CI, 2-SPD
32	2	500230	GREASE ZERK, 1/4-28 90deg
33	1	510174	GREASE ZERK, 1/4-28 ST

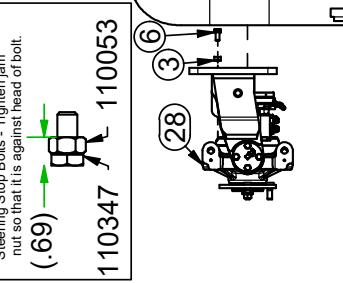
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Front Left Wheel Motor:

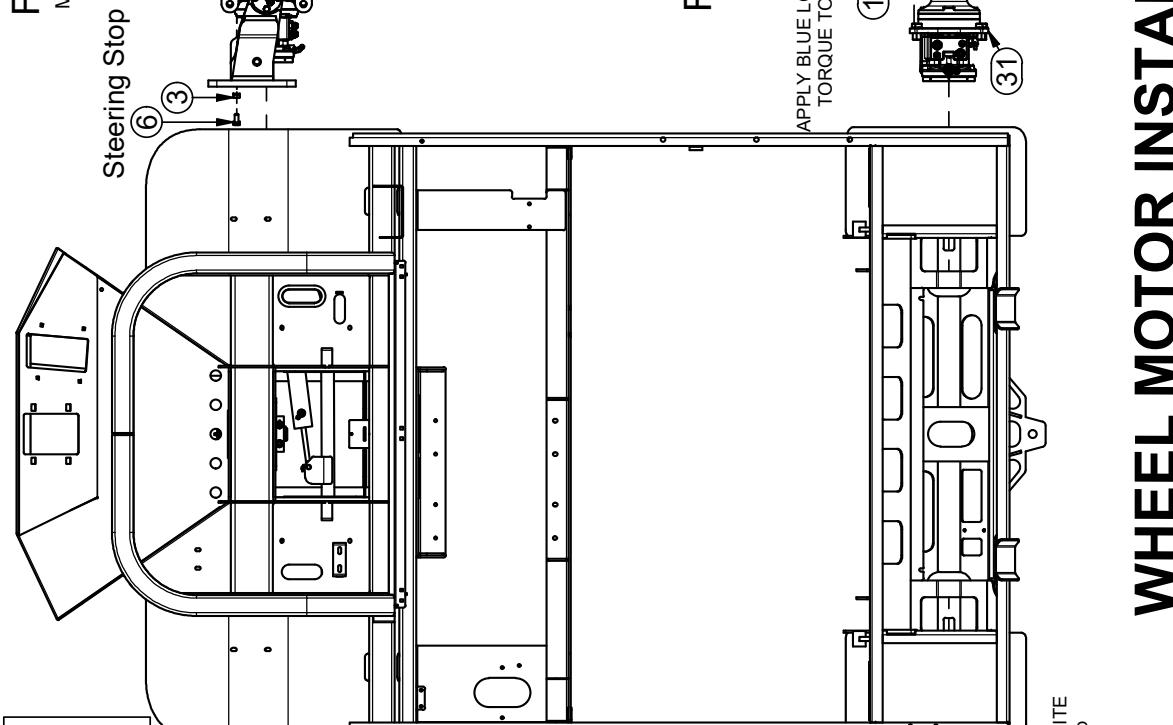
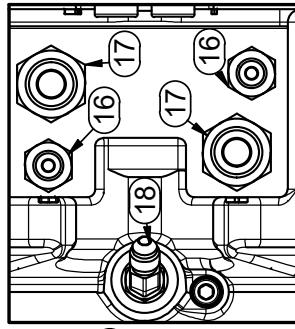
Model Code:

MGE02-2-G1A-W10-A121-Y8-JM

Steering Stop Bolts - Tighten jam nut so that it is against head of bolt.


110347 / 110053


Front Right Wheel Motor:
 Model Code: MGE02-2-D1A-W20-C121-Y8-JM

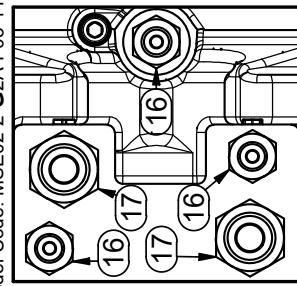


Parts List

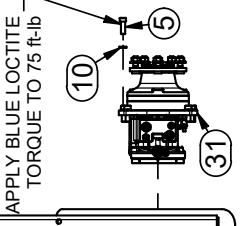
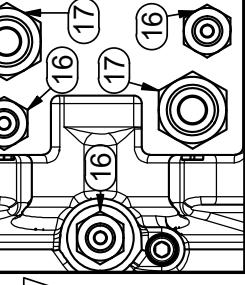
ITEM	QTY	PART #	DESCRIPTION
3	2	110053	Hex Nut M12 X 1.75 Thd
5	20	110244	BOLT, 1/2-13 X 1.5 SHCS
6	2	110347	BOLT, M12x1.75x25 Gr-10.9
16	10	120249	ADAPTER, 4M1-6MB
17	8	120446	ADAPTER, 8M1-10MB
18	2	120732	ADAPTER, 4M1-6MB 45
19	2	200029	COTTER PIN, 5/32 X 1
28	1	323055	MOTOR, LH FRONT WHEEL, 24.3 CI, 2-SPD
29	1	323056	MOTOR, RH FRONT WHEEL, 24.3 CI, 2-SPD
30	1	323057	MOTOR, LH REAR WHEEL, 24.3 CI, 2-SPD
31	1	323058	MOTOR, RH REAR WHEEL, 24.3 CI, 2-SPD

Left Rear Wheel Motor:

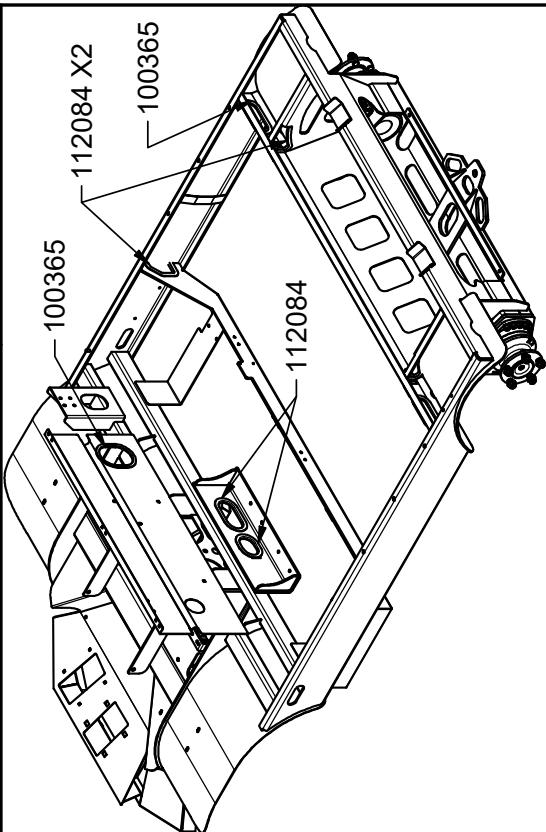
Model Code: MSE02-2-G2A-F03-1120-Y8-JM



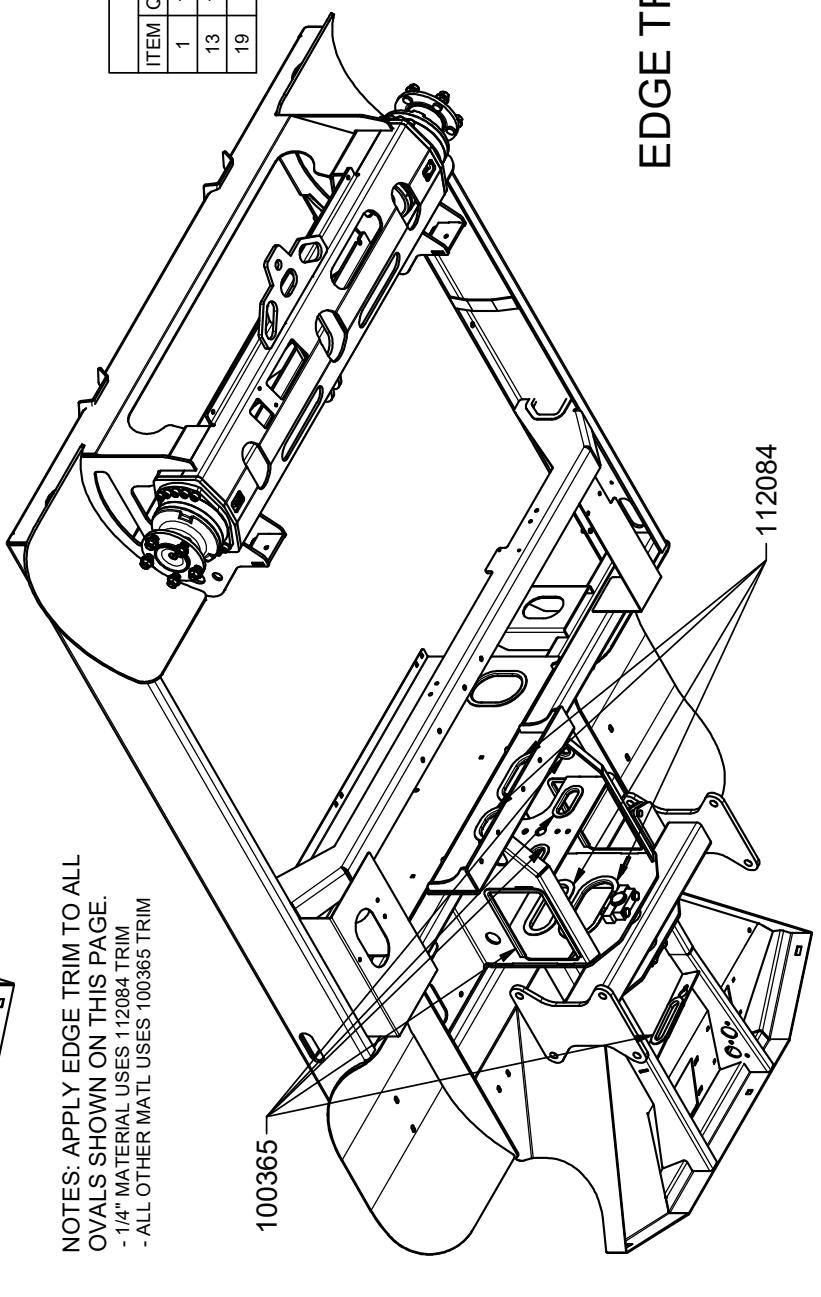
Right Rear Wheel Motor:
 Model Code: MSE02-2-D2A-F03-1120-Y8-JM



WHEEL MOTOR INSTALLATION



Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	10'	100365	MOLDING - EDGE GUARD, 5/32
13	13'	112084	Rubber Seal, .625 X .25
19	2	200029	COTTER PIN, 5/32 X 1



NOTES: APPLY EDGE TRIM TO ALL
OVALS SHOWN ON THIS PAGE.
- 1/4" MATERIAL USES 112084 TRIM
- ALL OTHER MATERL USES 100365 TRIM

EDGE TRIM PLACEMENT

112084

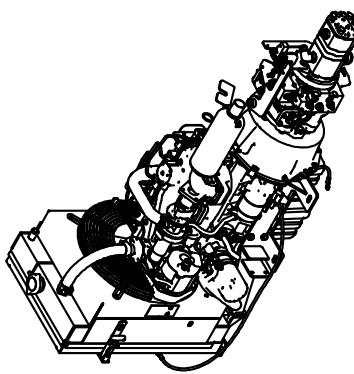
7-23-2020

305072

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Parts List

ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION
1	1	102074	Clamp, Adel 75w x 1.25id x 406 Hole	36	1	302138	Extension Spring, .730 x .0915 x 4.00
2	4	110001	BOLT, 1/2-13 X 1.25, WIZ FLANGE	37	1	305073	ASSY, RADIATOR SCREEN
3	2	110020	Bolt, 5/16-18 X 0.75,in Carriage	38	1	315186	Weldment, Kubota Throttle Mnt
4	6	110069	WASHER, 5/16" FLAT SAE	39	1	315379	WELDMENT, RADIATOR MOUNT
5	3	110074	Hex Nut M6 X 1.0 Thrd	40	1	315380	WELDMENT, NEUTRAL CENTERING
6	1	110141	NUT, M8 X 1.25 WIZFLANGE	41	2	317301	CATCH, LATCH
7	2	110155	WASHER, 3/8" FLAT SAE	42	1	317302	BRKT, NEUTRAL SPRING
8	2	110176	BOLT, M10x1.5 x 35 SHCS	43	1	317303	BRKT, NEUTRAL SAFETY SW
9	4	110220	BOLT, 1/2-13 X 1, WIZ FLANGE	44	1	317304	LEVER, PROPULSION PUMP
10	2	110419	BOLT, 1/2-13 X 1.75	45	1	317305	BRKT, PUSH/PULL CABLE
11	2	110422	BOLT, 5/16-18 X .75	46	1	317316	BOLT, NEUTRAL CENTERING PIVOT
12	1	110459	BOLT, 5/16-18 X 1, WIZ FLANGE	47	1	323054	Pump, PM30 Propulsion, 1.53 Ci / .49 Ci Charge
13	5	110469	BOLT, M8x1.25 x 20 Gr.10.9	48	1	323063	PUMP, DOUBLE GEAR 1.16 / 24 Ci
14	9	110560	BOLT, M10-1.25 X 20 HHCS 8.8 PLAIN	49	1	332004	Sender, Water, 3/8 Npt
15	4	110588	NUT, 1/2-13 WIZ FLANGE	50	1	332066	SWITCH, 221 F TEMP, 6MP, N.O. RISING
16	3	110606	NUT, 5/16-18 WIZ FLANGE	51	1	342011	ADAPTER - PUMP, KUBOTA 1505 KIT
17	2	110666	WASHER, 1/2" LOCK	52	1	342067	MANIFOLD, TOP OUTLET EXHAUST
18	7	110674	WASHER, 5/16" LOCK	53	2	540079	BEARING, BALL, 1620RS
19	11	110689	Washer, M10, Lock	54	1	801002	HOSE, UPPER RADIATOR
20	2	110692	WASHER, 6mm LOCK	55	1	801003	HOSE, LOWER RADIATOR
21	1	110728	CLAMP, ADEL DOUBLE .75WX.5IDX.406HOLE	56	1	815097	WELDMENT, LH ENGRAD MOUNT
22	2	110931	BOLT, M6x1 x 25 Gr 8.8	57	1	815098	WELDMENT, RH ENGRAD MOUNT
23	4	112101	CLAMP, 1.50", T-BOLT	58	1	820247	O-RING 2-042 1/16" BUNA
24	1	120144	ADAPTER, 6MJ-10MB	59	1	830063	CABLE, POSITIVE BATTERY
25	1	120224	ADAPTER, 10MJ-10MB90	60	1	832001	CABLE, GROUND
26	2	120249	ADAPTER, 4MJ-6MB	61	1	832002	SWITCH ROLLER PLUNGER
27	1	120254	ADAPTER, 12MJ-12MB	62	1	832072	HARNESS, 72LC ENGINE
28	2	120256	ADAPTER, 12MJ-16MB	63	1	832076	Switch, 190 F Temp, 8MB, N.C. Rising
29	1	120319	ADAPTER, 6MJ-6MB	64	1	843005	ENGINE, KUBOTA V1505 TIER 4F (25HP)
30	1	120546	ADAPTER, 20BH-16MB90	65	1	843006	COOLING PACKAGE, RADIATOR & OIL
31	1	120740	Adapter, 20mj-12mb				
32	2	132014	INSULATOR CAP, (ALTERNATOR)				
33	1	132092	FUSE COVER, BUSS CFCOVER-1R				
34	1	132093	FUSE HOLDER, BUSS CFBAR1-M8XSP				
35	1	132150	FUSE, 50 AMP				

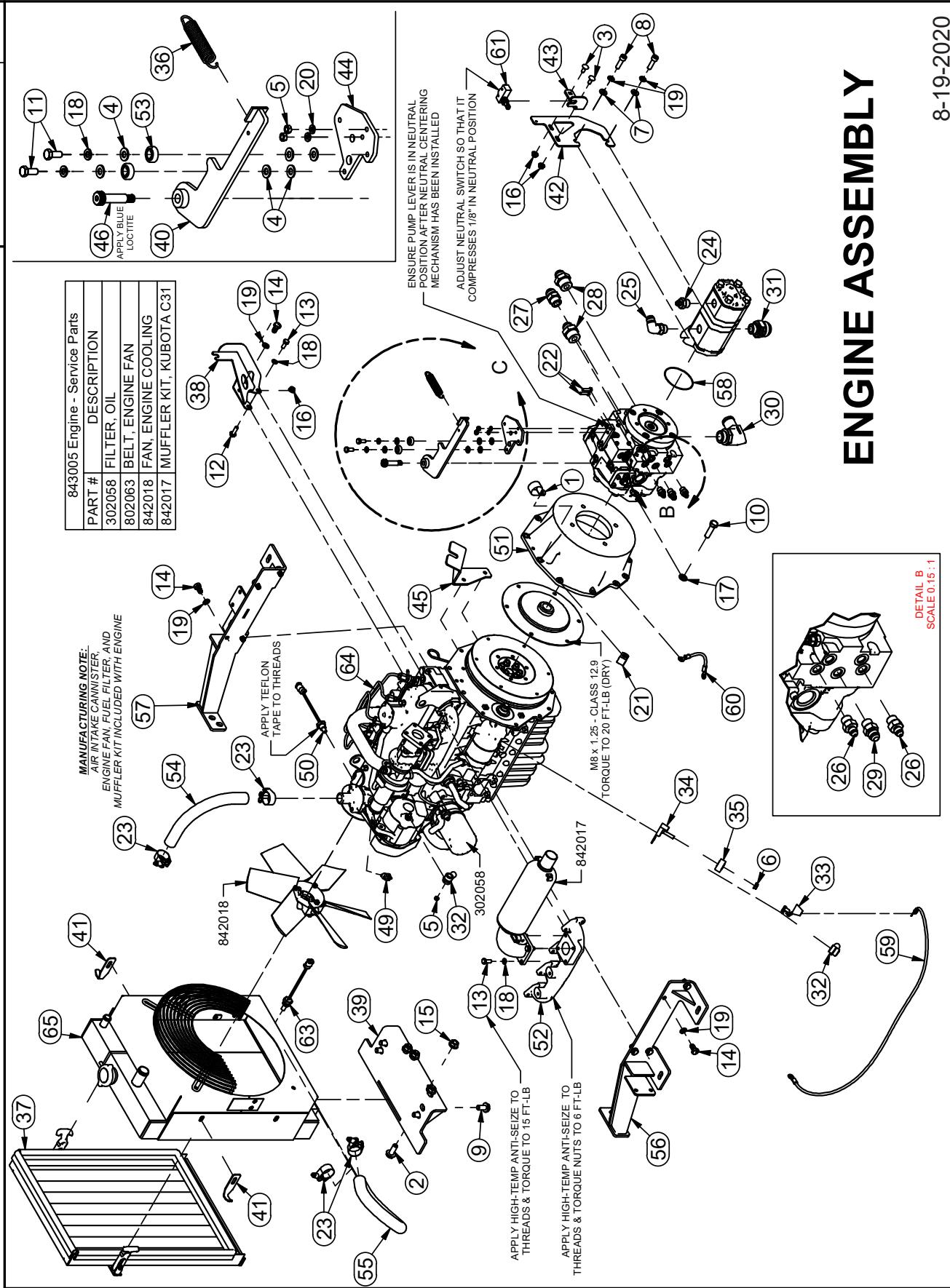


ENGINE ASSEMBLY

8-19-2020

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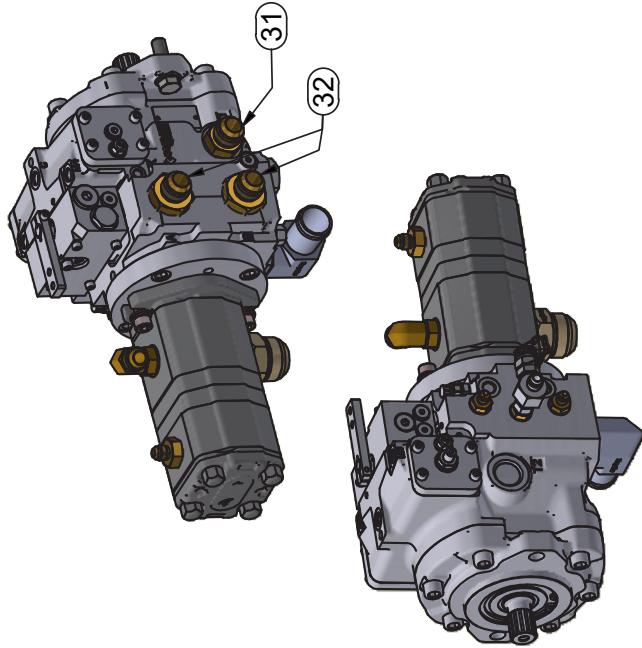
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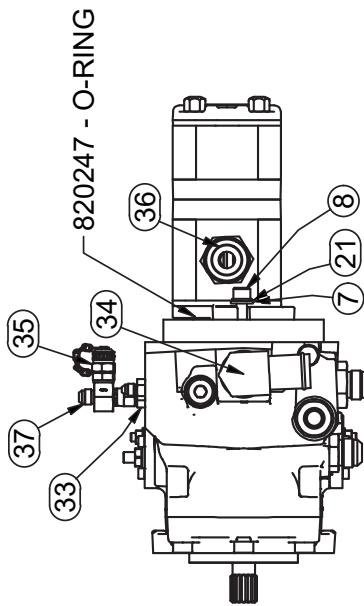
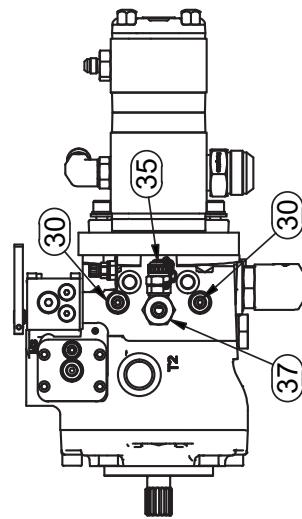
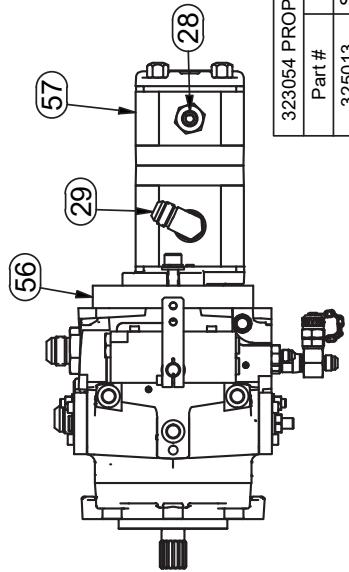
HYDRAULIC PUMP ASSEMBLY

305072

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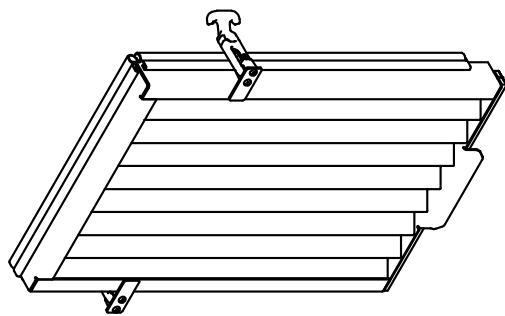


322054 PROPULSION PUMP - SERVICE PARTS	
Part #	DESCRIPTION
325013	SEAL KIT, PM30 SERVO CONTROL

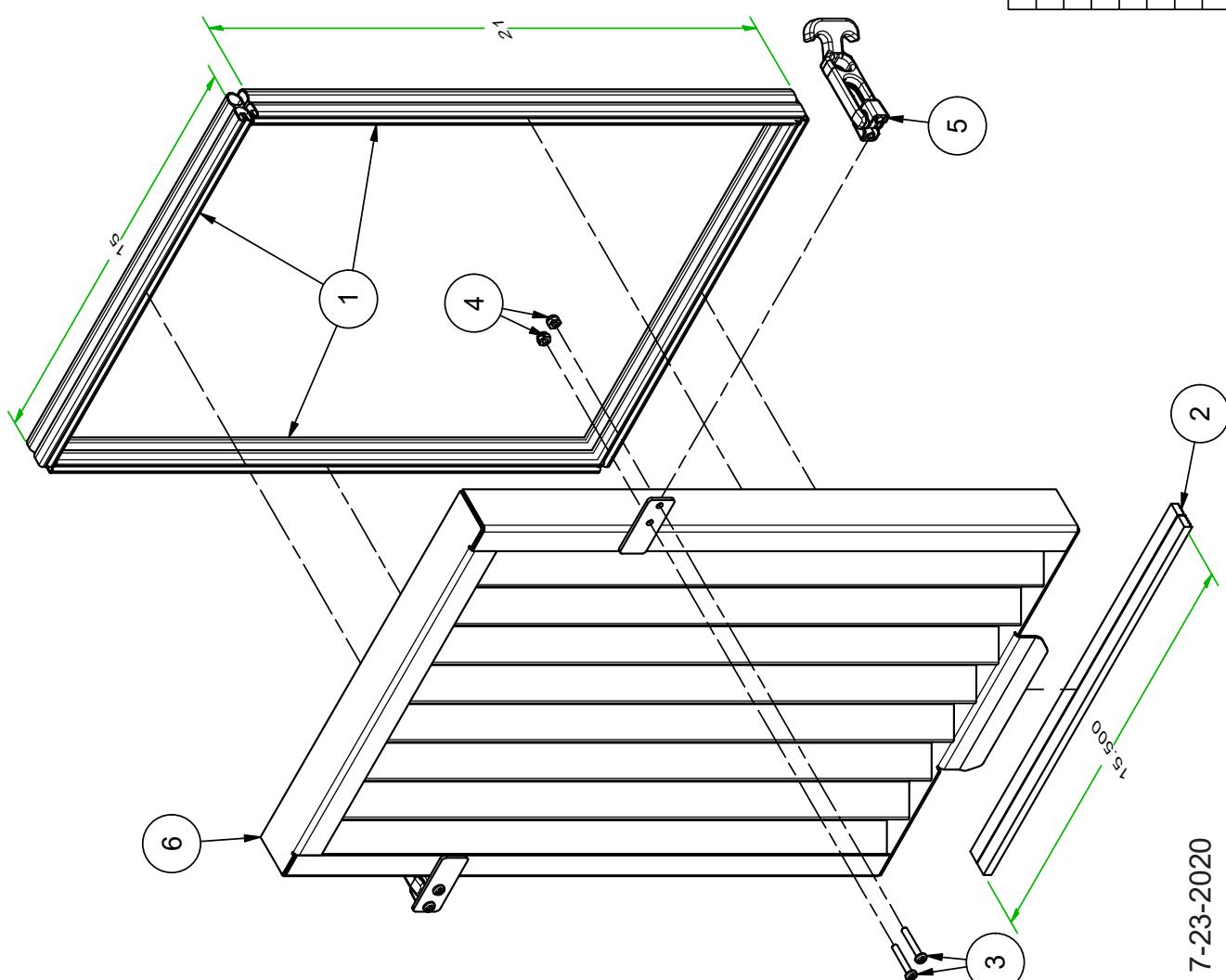


Parts List							
ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION
7	2	110155	WASHER, 3/8" FLAT SAE	34	1	120546	ADAPTER, 20BH-16MB90
8	2	110176	BOLT, M10x1.5 x 35 SHCS	35	1	120705	Test Port, M16-.4MB
21	11	110689	Washer, M10, Lock	36	1	120740	Adapter, 20mj-12mb
28	1	120144	ADAPTER, 6MJ-10MB	37	1	120754	Adapter, 6fix-6mj, -4fb Gage Port
29	1	120224	ADAPTER, 10MJ-10MB90				
30	2	120249	ADAPTER, 4MJ-6MB	56	1	322054	Pump, PM30 Propulsion, 1.53 CI / .49 CI Charge
31	1	120254	ADAPTER, 12MJ-12MB	57	1	322063	PUMP, DOUBLE GEAR 1.16 / 24 CI
32	2	120256	ADAPTER, 12MJ-16MB				
33	1	120319	ADAPTER, 6MJ-6MB	67	1	820247	O'RING 2-042 1/16" BUINA

305073



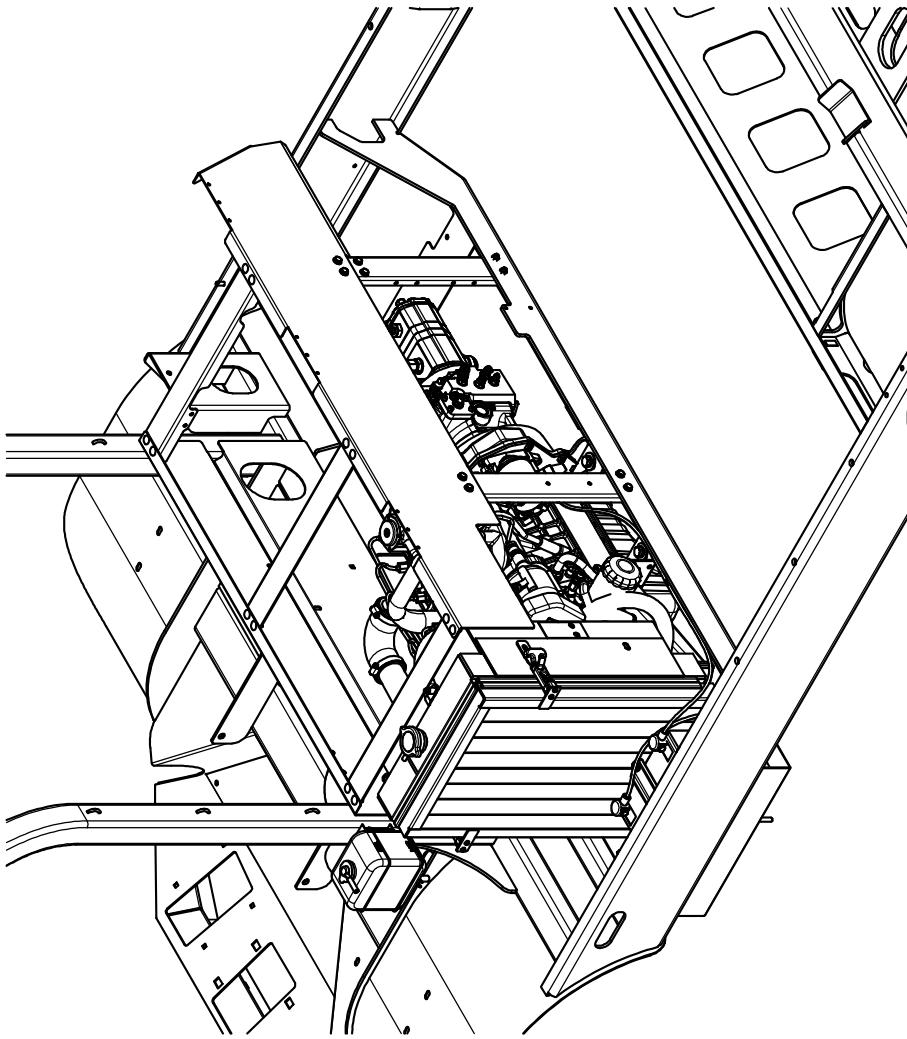
Radiator Screen Assembly



ENGINE INSTALLATION

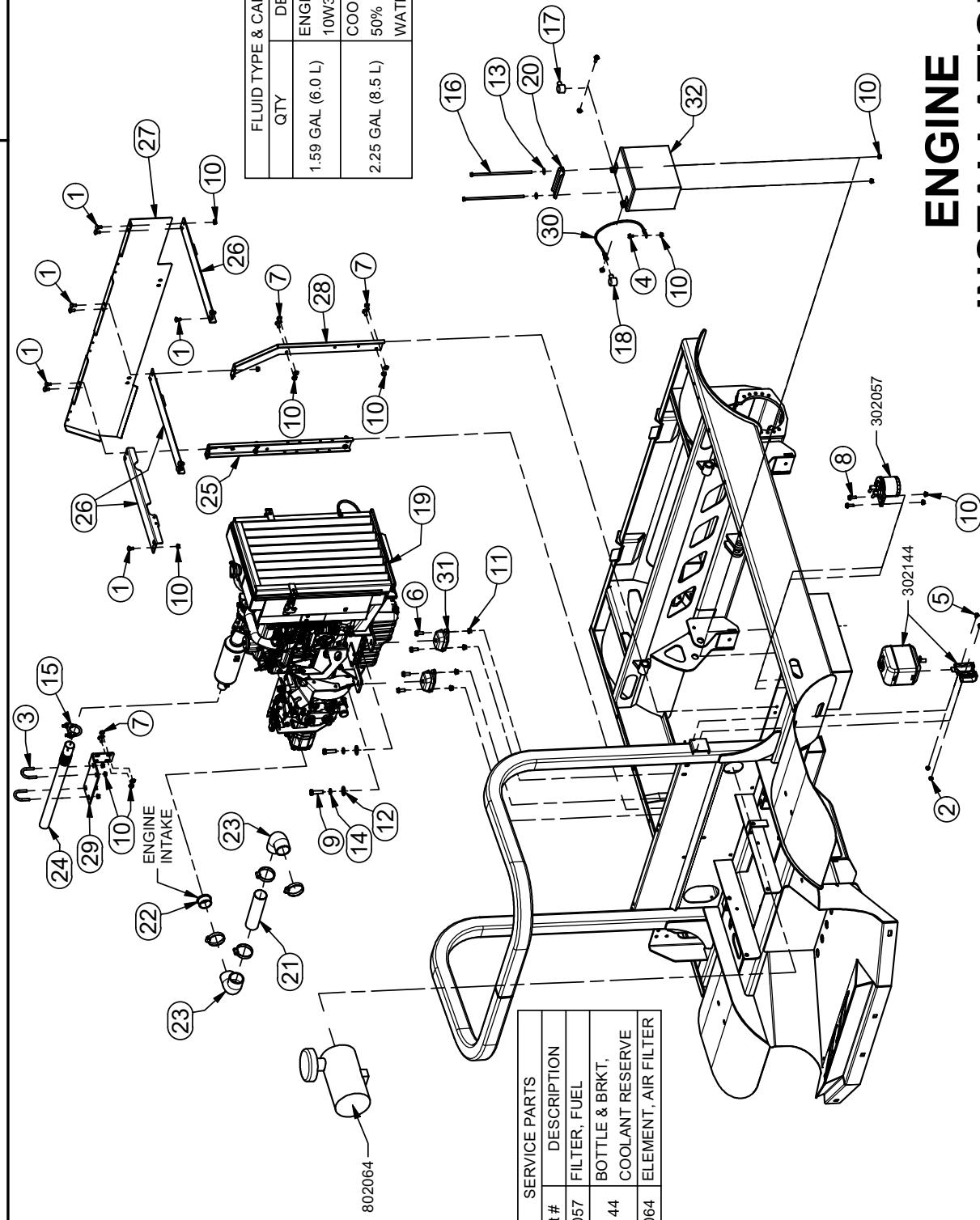
Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	12	110020	Bolt, 5/16-18 X 0.75 in Carriage NUT, 1/4-20 WIZ FLANGE
2	2	110290	U-BOLT, 5/16
3	2	110362	BOLT, 5/16-18 X 0.5, WIZ FLANGE
4	1	110426	BOLT, 1/4-20 X 0.5, WIZ FLANGE
5	2	110434	BOLT, 3/8-16 X 1, WIZ FLANGE
6	8	110440	BOLT, 5/16-18 X 0.75, WIZ FLANGE
7	10	110444	BOLT, 5/16-18 X 1, WIZ FLANGE
8	2	110459	BOLT, 5/16-18 X 1, WIZ FLANGE
9	4	110577	BOLT, M12x1.75 x 45 Gr 10.9
10	31	110606	NUT, 5/16-18 WIZ FLANGE
11	8	110645	NUT, 3/8-16 WIZ FLANGE
12	4	110658	WASHER, 1/2" FLAT STANDARD
13	2	110665	WASHER, 5/16" FLAT STANDARD
14	4	110666	WASHER, 1/2" LOCK
15	1	110779	CLAMP, 1 1/2" EXHAUST
16	2	111187	BOLT, 5/16-18 X 10.0, Zinc
17	1	132069	BATTERY TERMINAL COVER, POSITIVE
18	1	132070	BATTERY TERMINAL COVER, NEGATIVE
19	1	305072	ASSY, ENGINE
20	1	311603	BRACKET - HOLD DOWN, BATTERY
21	1	311941	TUBE, AIR INTAKE
22	1	312036	REDUCER, 2.0" TO 1.75"
23	2	312037	ELBOW, 2.0" 90 DEG
24	1	315389	WELDMENT, HAWK EXHAUST
25	1	317205	SUPPORT, REAR SHIELD
26	3	317206	SUPPORT, UPPER SHIELD
27	1	317235	SHIELD, REAR ENGINE
28	1	317236	SUPPORT, VERTICAL REAR SHIELD
29	1	317248	BRKT, EXHAUST SUPPORT
30	1	530051	CABLE, BATTERY/GND 16" BLACK
31	4	800021	MOTOR MOUNT
32	1	832011	BATTERY, SEALED GEL W/L TERMINAL

7-23-2020



305082

REV: A

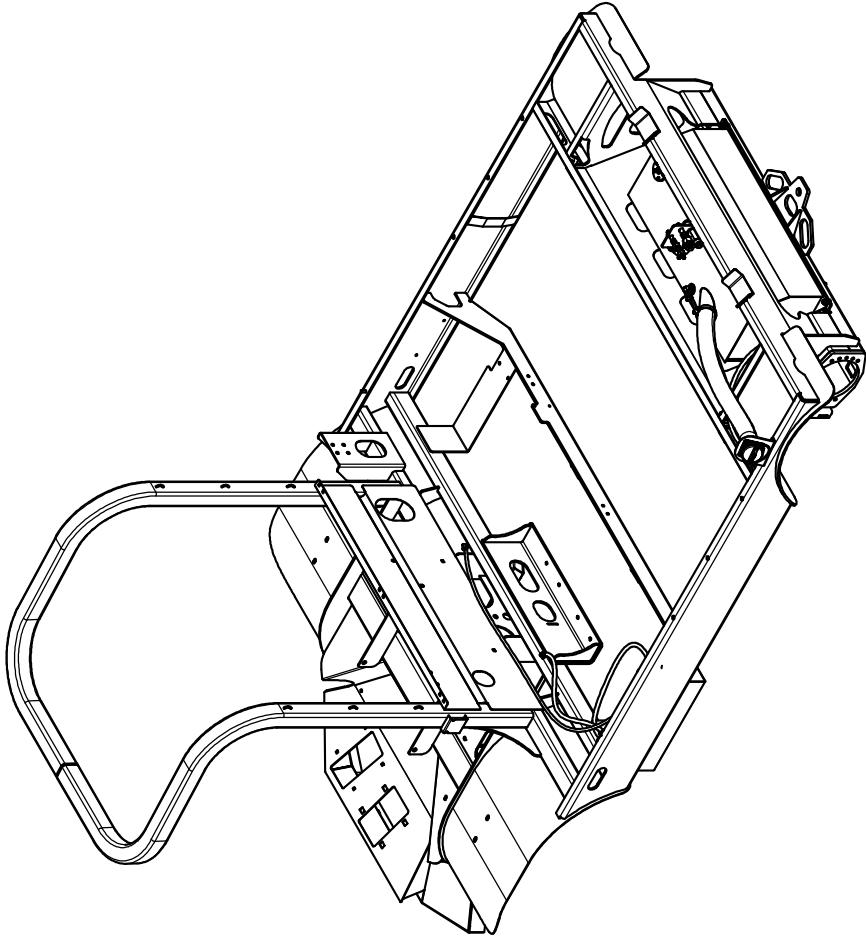


ENGINE INSTALLATION

7-23-2020

FUEL TANK INSTALLATION

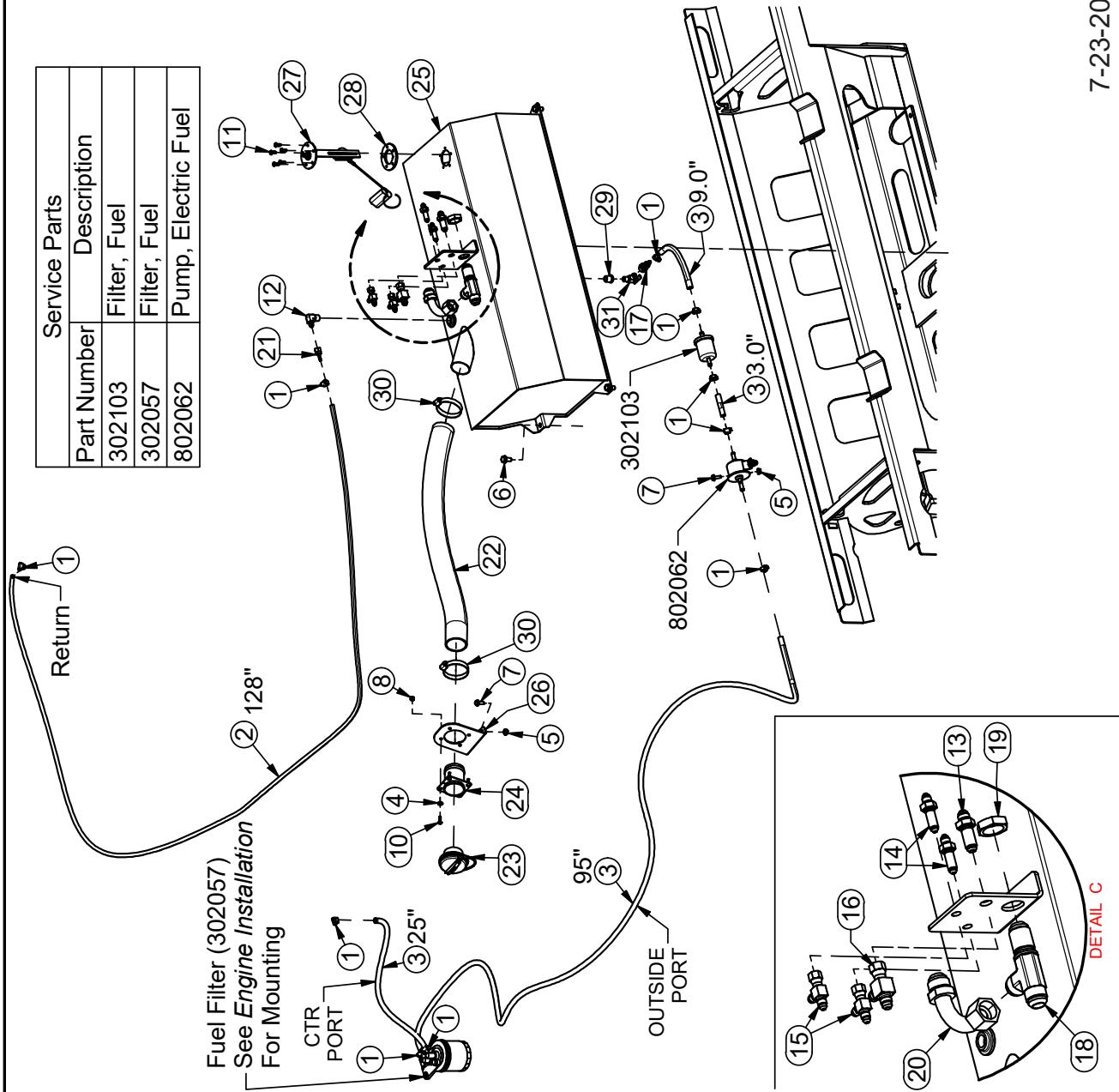
Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	10	100361	CLAMP, HOSE #4-25 MINI
2	128"	100708	Hose, 3/16 High Pressure Fuel
3	132"	100756	Hose, 5/16 High Pressure Fuel
4	1	110090	WASHER, #10 FLAT STANDARD
5	4	110290	NUT, 1/4-20 WIZ FLANGE
6	4	110437	BOLT, 3/8-16 X 0.75, WIZ FLANGE
7	4	110468	BOLT, 1/4-20 X 0.75, WIZ FLANGE
8	4	110631	NUT, 10-24 LOCK NYLON INSERT
9	4	110645	NUT, 3/8-16 WIZ FLANGE
10	4	110709	SCREW, 10-24 X 0.75, RHMS
11	5	112053	SCREW, 10-32 X 1/2 MACH SEAL
12	1	120040	ADAPTER, 4MJ-6MP90
13	1	120102	ADAPTER, BULKHEAD, 6MJ-6MJ
14	2	120126	ADAPTER, BULKHEAD, 4MJ-4MJ
15	2	120215	ADAPTER, 4MJ-4FJX-4MJ
16	1	120216	ADAPTER, 6MJ-6FJX-6MJ
17	1	120378	ADAPTER, 5H-6FBX
18	1	120487	ADAPTER, 12MJ-12MJ-12MJ BULKHEAD
19	1	120495	Nut, Lock, Bulkhead, -12
20	1	120516	Adapter, 12FJ-12mj90tube
21	1	120655	Adapter, 3hb-4fj
22	1	301010	HOSE, FUEL FILL
23	1	302137	FUEL CAP, 2" DIESEL, GREEN
24	1	315301	WELDMENT, DIESEL FILLER NECK
25	1	315342	WELDMENT, FUEL TANK
26	1	317175	BRKT, FUEL FILL
27	1	332058	Fuel Level Sender, 9.5" Depth
28	1	500172	GASKET, FUEL SENDER
29	1	500209	FITTING, REDUCER 3/8 X 1/4 NPT
30	2	511003	CLAMP, HOSE #36 2.25"
31	1	802023	VALVE, FUEL SHUT OFF 6MB-4MP



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FUEL TANK INSTALLATION

Service Parts	
Part Number	Description
302103	Filter, Fuel
302057	Filter, Fuel
802062	Pump, Electric Fuel

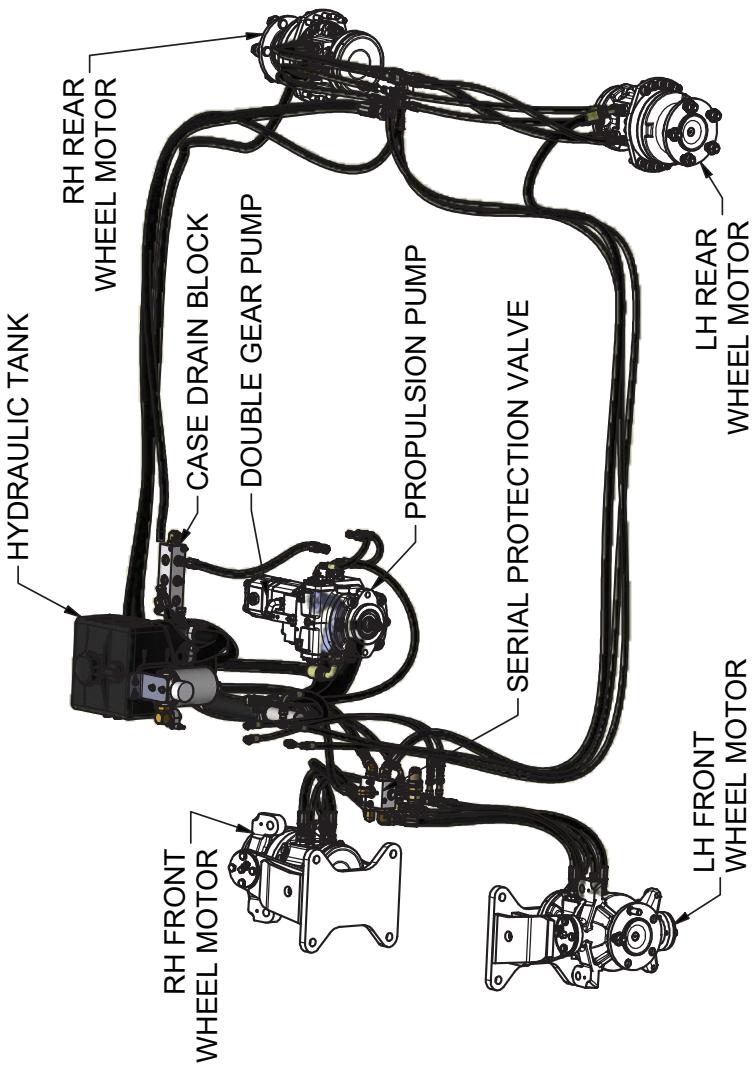


PROPELLION HYDRAULIC INSTALLATION

305097

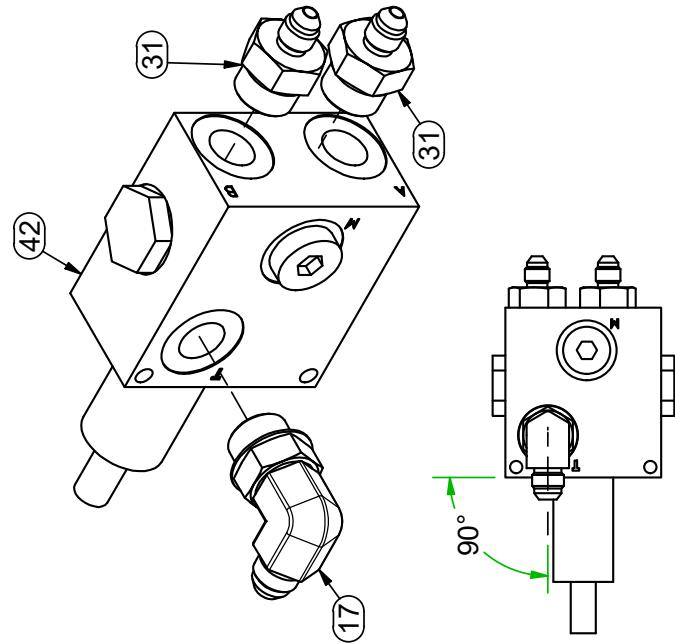
REV: A

Parts List						Parts List					
ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION
1	6	110290	NUT, 1/4-20 WIZ FLANGE	11	6	112008	CLAMP, 1.25", T-BOLT	21	5	120222	ADAPTER, 6MJ-6MB90
2	4	110410	BOLT, 1/4-20 X 2.5	12	2	112101	CLAMP, 1.50", T-BOLT	22	2	120226	ADAPTER, 12BH-12MB90
3	4	110434	BOLT, 1/4-20 X 0.5, WIZ FLANGE	13	2	112137	CLAMP, 2.00", T-BOLT	23	2	120245	ADAPTER, 8MJ-10MB90
4	4	110440	BOLT, 3/8-16 X 1, WIZ FLANGE	14	1	120057	ADAPTER, 6MJ-6MJ-6FJX	24	4	120249	ADAPTER, 4MJ-6MB
5	2	110529	BOLT, 5/16-18 X 4.5	15	1	120102	ADAPTER, BULKHEAD, 6MJ-6MJ	25	1	120292	NUT, BULKHEAD LOCKNUT, -6
6	2	110606	NUT, 5/16-18 WIZ FLANGE	16	2	120126	ADAPTER, BULKHEAD, 4MJ-4MJ	26	1	120303	ADAPTER, 12MB-16HB
7	2	111011	Bolt, M5-80 X 55, SHCS, Stainless	17	3	120134	ADAPTER, 6MJ-8MB90	27	3	120319	ADAPTER, 6MJ-6MB
8	2	111012	STEP AP203	18	2	120139	ADAPTER, 8MJ-10MB 45	28	1	120495	Nut, Lock, Bulkhead, -12
9	2	111013	WASHER, M5, Flat, Stainless	19	1	120187	ADAPTER, 12BH-8MB90	29	1	120516	Adapter, 12FJX-12nigbtube
10	3	112007	CLAMP, 1.75", T-BOLT	20	1	120216	ADAPTER, 6MJ-6FJX-6MJ	30	1	120663	ADAPTER, BULKHEAD, 12MJ-12MJ
				31	2	120739	ADAPTER, 4MJ-8MB	32	2	120741	ADAPTER, 4MJ-4MJ-4FJX
				33	1	120742	ADAPTER, 12MB-12FB-12FB	34	1	122016	ADAPTER, 12MJ-12MJ-12FJX
				35	1	122034	HEAD, SPIN-ON FILTER, -12SAE	36	1	260265	MOUNTING BRACKET, FILTER
				37	1	305087	Assy, Hydraulic Tank, ISO	38	1	322095	BLOCK, CASE DRAIN
				39	1	322096	TEE, 1.5 x 1.25 x 1.25 BH	40	1	322098	GAUGE, PRESSURE, 600 PSI, 4MB
				41	1	323059	VALVE, SERIAL PROTECTION	42	1	323060	VALVE, LOOP FLUSH
				43	1	323064	HOSE KIT, 4WD HAWK GROUND DRIVE	44	1	323067	VALVE, BRAKE RELEASE & HI GEAR
				45	1	822044	FILTER, 3 MICRON	46	1	822045	GAUGE, OIL FILTER

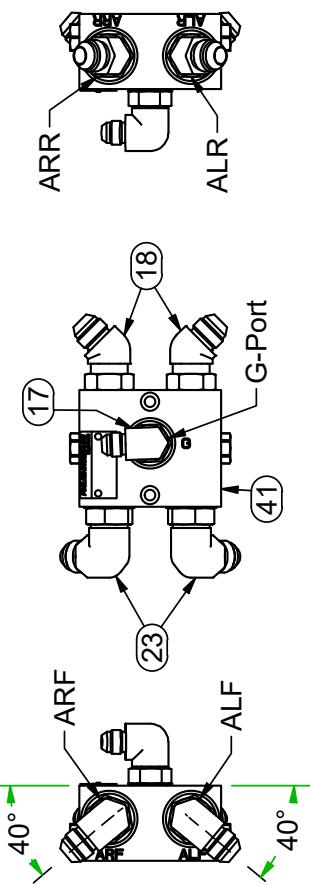
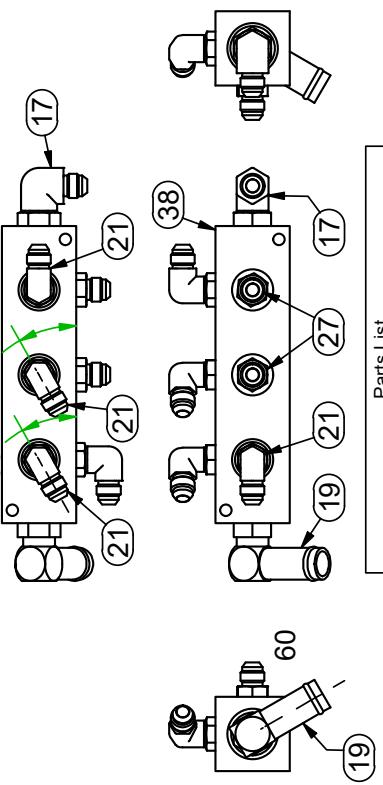


Loop Flush Valve

Parts List			
ITEM	QTY	PART #	DESCRIPTION
17	1	120134	ADAPTER, 6MJ-8MB90
18	2	120139	ADAPTER, 8MJ-10MB 45
23	2	120245	ADAPTER, 8MJ-10MB90
41	1	322059	VALVE, SERIAL PROTECTION

**Serial Protection Valve**

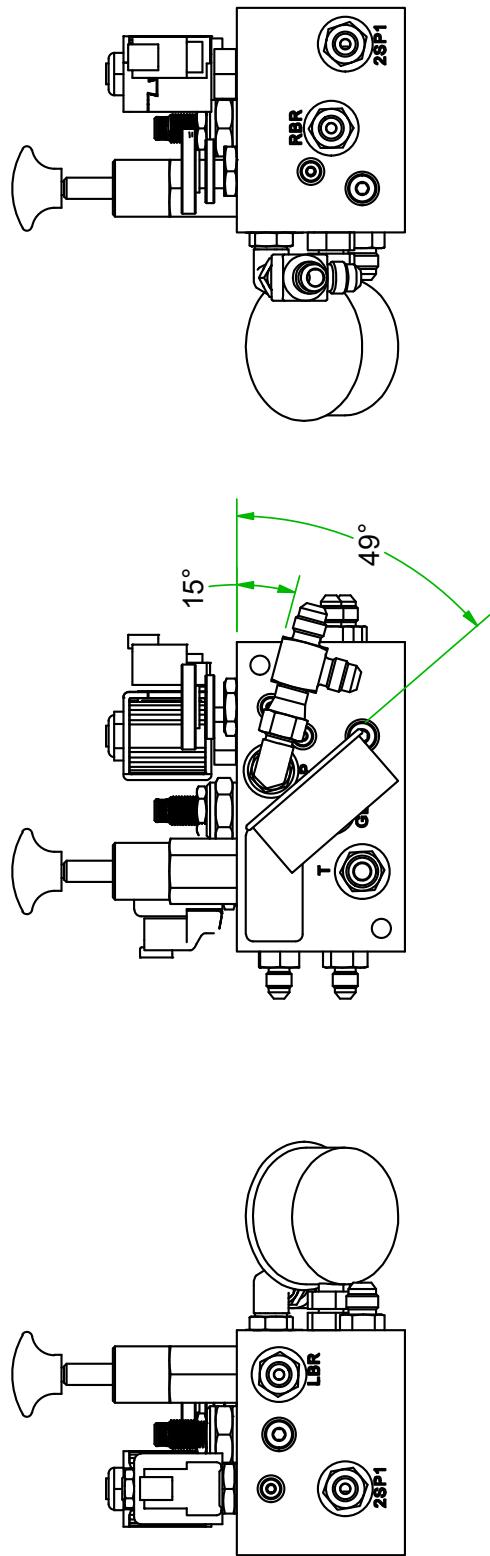
Parts List			
ITEM	QTY	PART #	DESCRIPTION
17	1	120134	ADAPTER, 6MJ-8MB90
18	2	120139	ADAPTER, 8MJ-10MB 45
23	2	120245	ADAPTER, 8MJ-10MB90
41	1	322059	VALVE, SERIAL PROTECTION

**Case Drain Block**

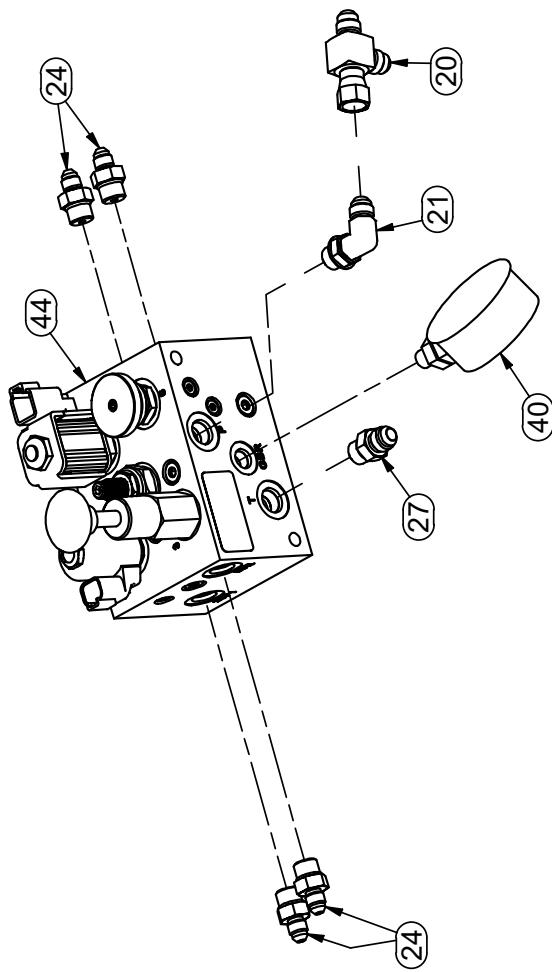
Parts List			
ITEM	QTY	PART #	DESCRIPTION
17	1	120134	ADAPTER, 6MJ-8MB90
19	1	120187	ADAPTER, 12BH-8MB90
21	4	120222	ADAPTER, 6MJ-6MB90
27	2	120319	ADAPTER, 6MJ-6MB
38	1	322095	BLOCK, CASE DRAIN

VALVE ASSEMBLIES

BRAKE RELEASE / HI GEAR VALVE ASSEMBLY



Parts List			
ITEM	QTY	PART #	DESCRIPTION
20	1	120216	ADAPTER, 6MJ-6FJX-6MJ
21	5	120222	ADAPTER, 6MJ-6MB90
24	4	120249	ADAPTER, 4MJ-6MB
27	3	120319	ADAPTER, 6MJ-6MB
40	1	322098	GAUGE, PRESSURE, 600 PSI, 4MB
44	1	323067	VALVE, BRAKE RELEASE & HI GEAR



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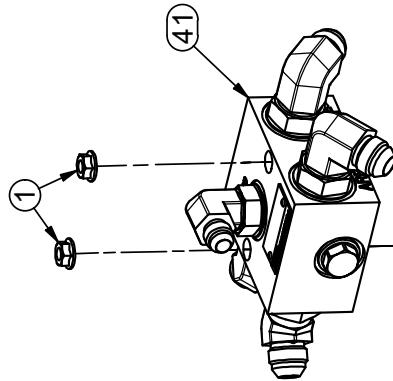
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REV: A

Parts List

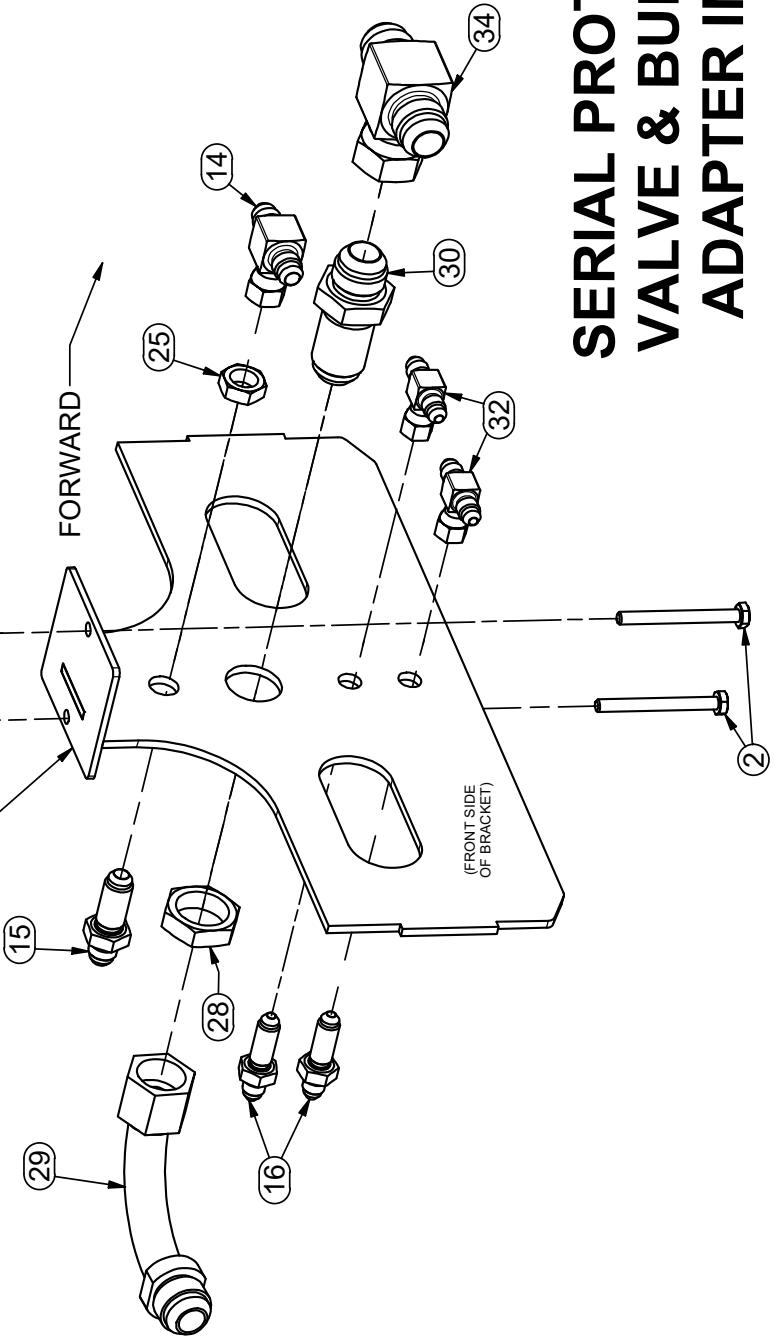
ITEM QTY PART # DESCRIPTION

2	4	110410	BOLT, 1/4-20 X 2.5
14	1	120057	ADAPTER, 6MJ-6MJ-XJ
15	1	120102	ADAPTER, BULKHEAD, 6MJ-6MJ
16	2	120126	ADAPTER, BULKHEAD, 4MJ-4MJ
25	1	120292	NUT, BULKHEAD LOCKNUT, -6
28	1	120495	Nut, Lock, Bulkhead, -12
29	1	120516	Adapter, 12fjx12mj90tube
30	1	120663	ADAPTER, BULKHEAD, 12MJ-12MJ
32	2	120741	ADAPTER, 4MJ-4MJ-4fjX
34	1	122016	ADAPTER, 12MJ-12MJ-12fj,X
41	1	323059	VALVE, SERIAL PROTECTION

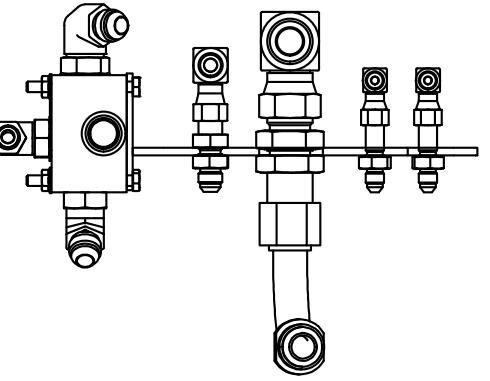


THIS BRACKET WELDMENT IS LOCATED BELOW THE SEAT MOUNTING POINT. IT IS PART OF THE FRAME WELDMENT.

SOME PARTS HIDDEN FOR CLARITY



ADAPTER ORIENTATION VIEW



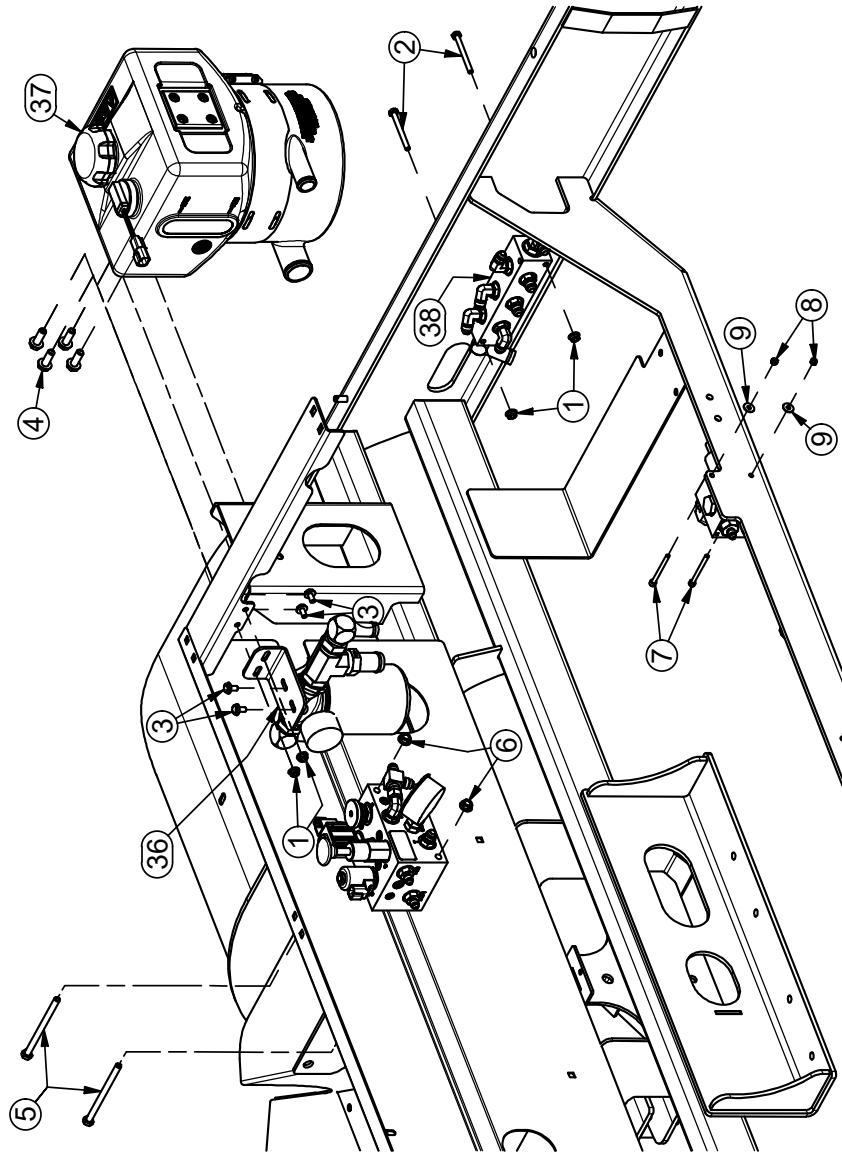
SERIAL PROTECTION VALVE & BULKHEAD ADAPTER INSTALL

7-23-2020

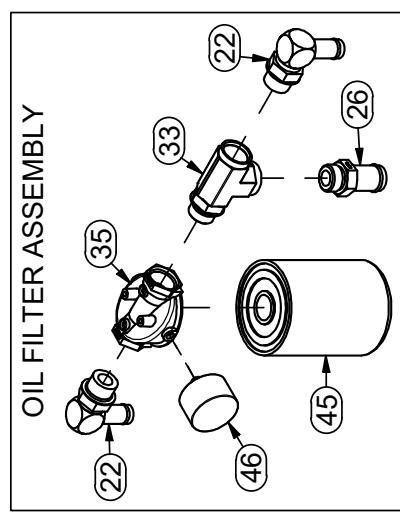
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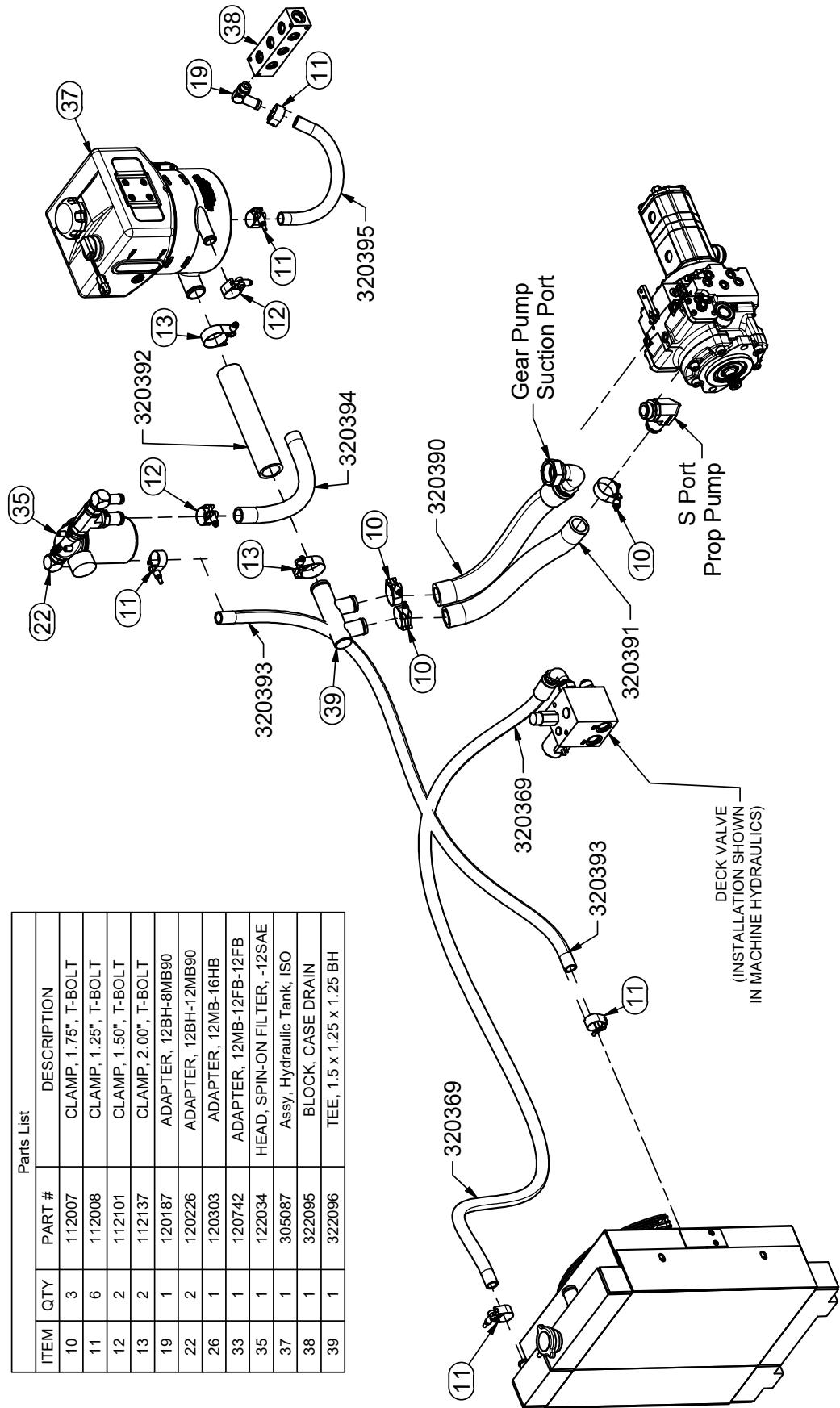
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TANK, FILTER, & VALVE INSTALLATION



SOME PARTS HIDDEN
FOR CLARITY

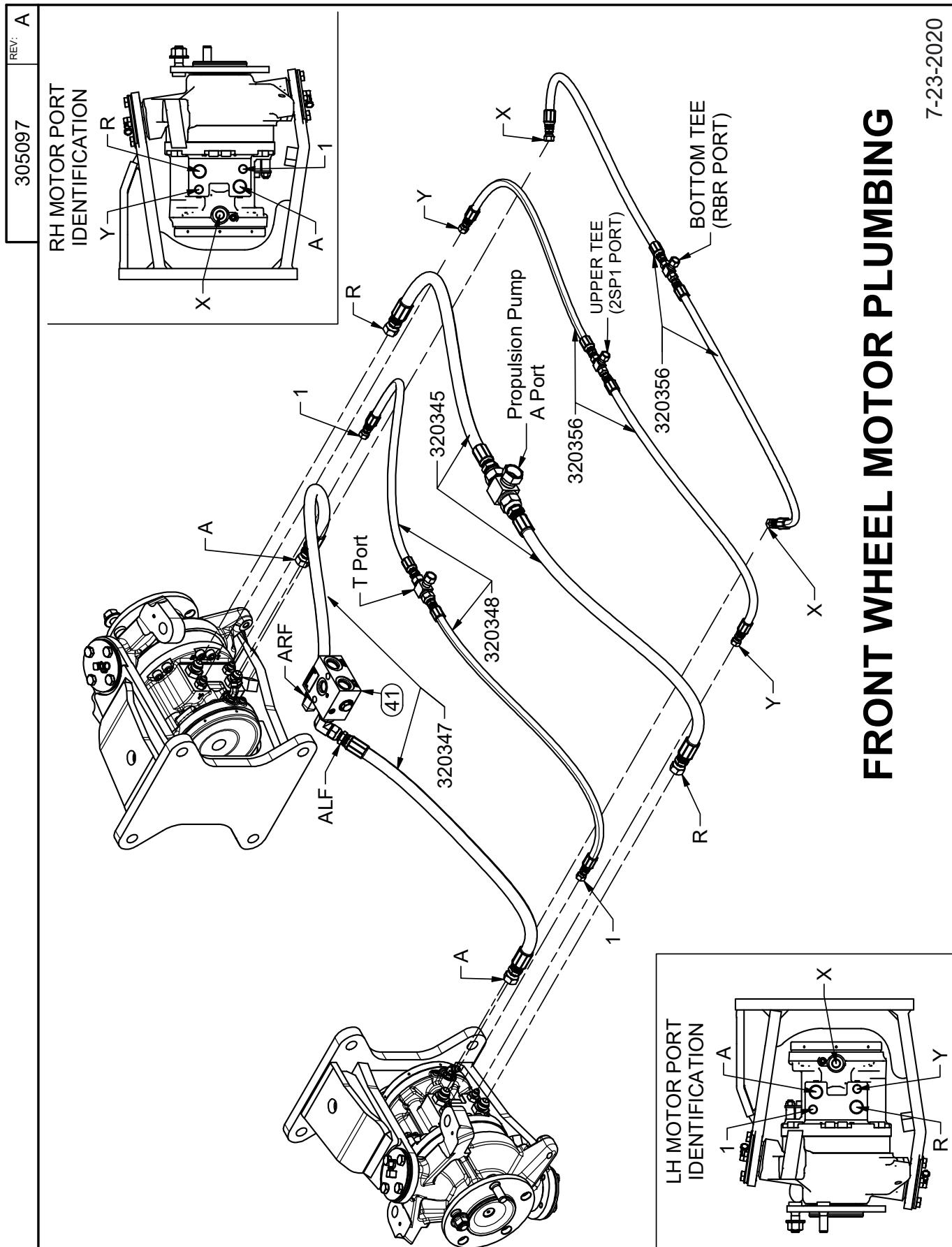




PROPULSION SUCTION & DRAIN PLUMBING

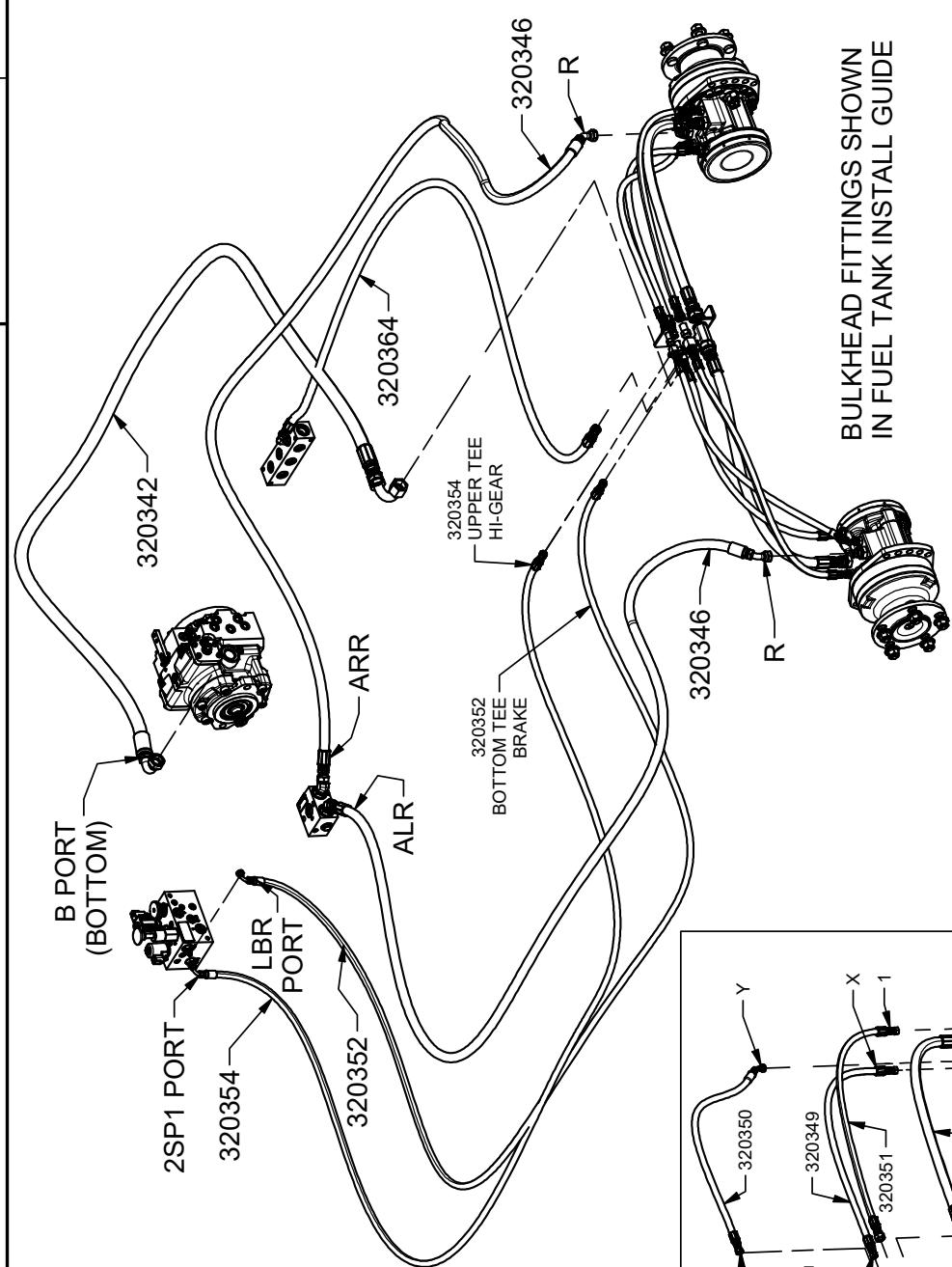
7-23-2020

FRONT WHEEL MOTOR PLUMBING

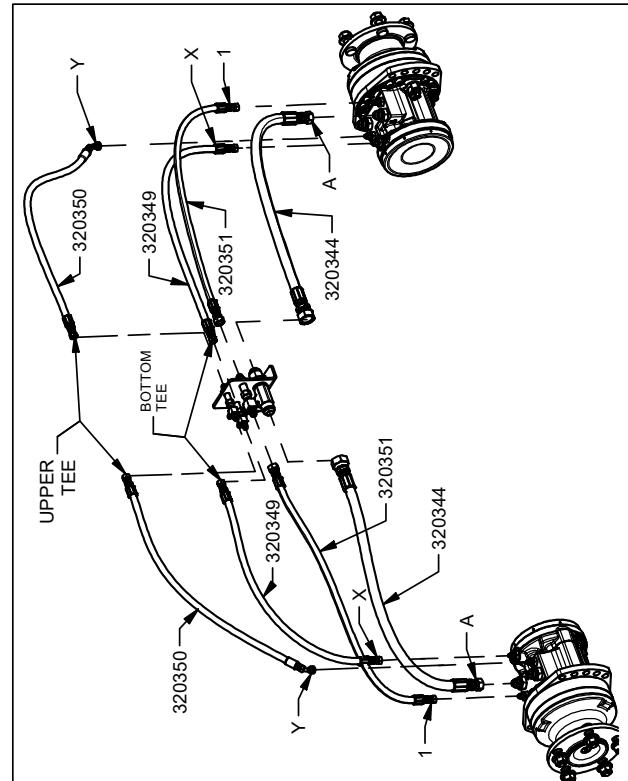


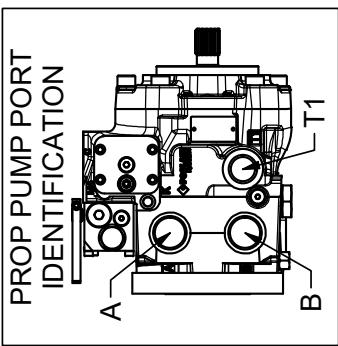
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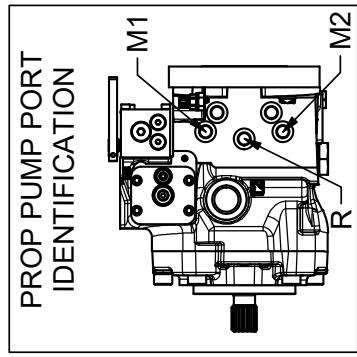


REAR WHEEL MOTOR PLUMBING

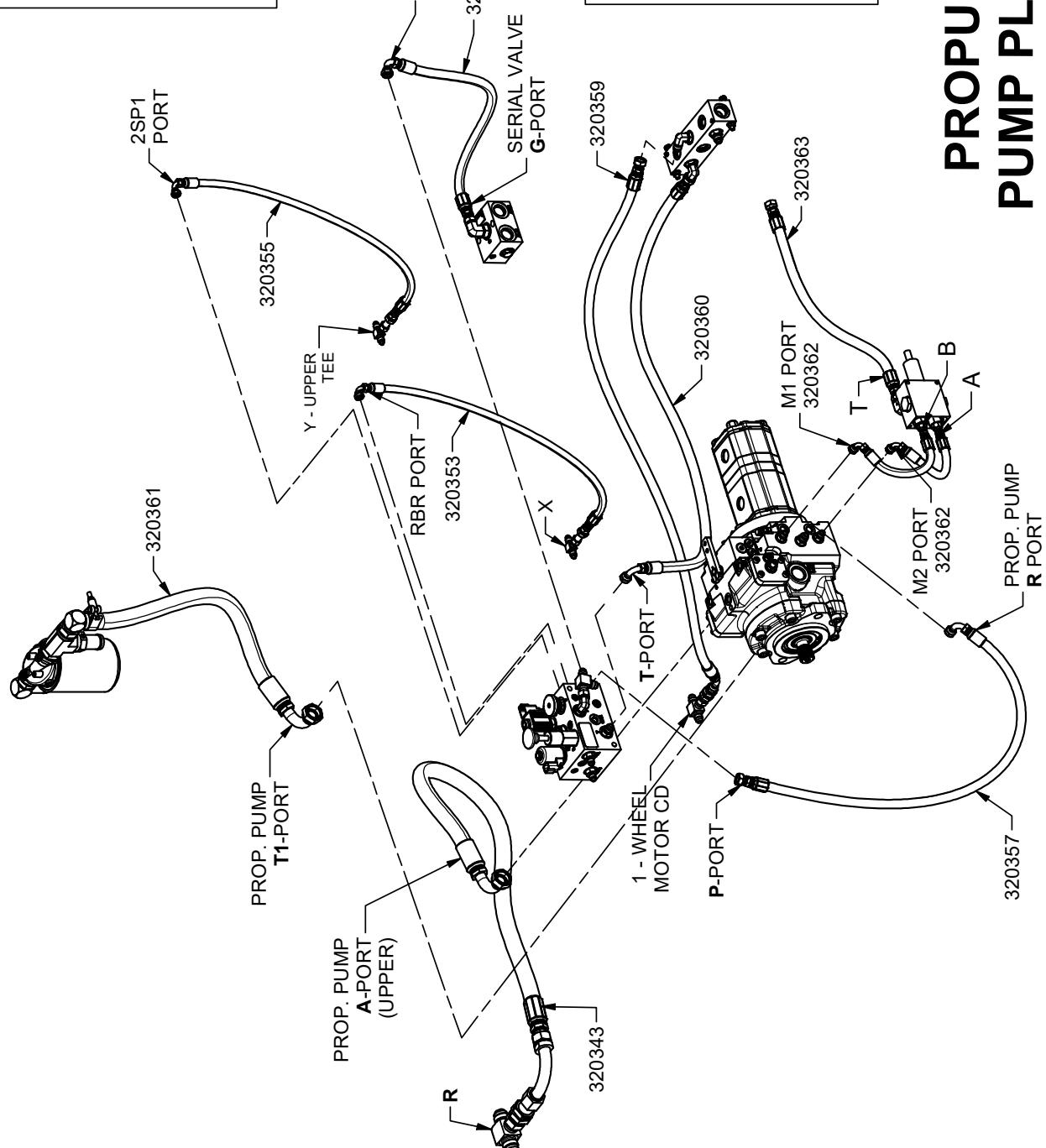




A
B
T1



M1
R
M2



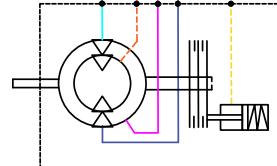
PROPELLION PUMP PLUMBING

7-23-2020

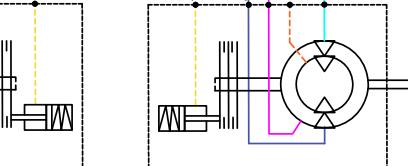
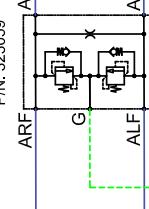
SWEeper PROPULSION SCHEMATIC

RH FRONT WHEEL MOTOR
PIN: 323056
MODEL CODE:
MGE02-2-D1A-W20-C121-Y8JM

RH REAR WHEEL MOTOR
PIN: 323058
MODEL CODE:
MSE02-2-D2A-F03-1120-Y8JM

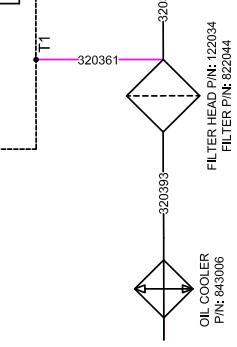


SERIAL PROTECTION
VALVE
PIN: 323059

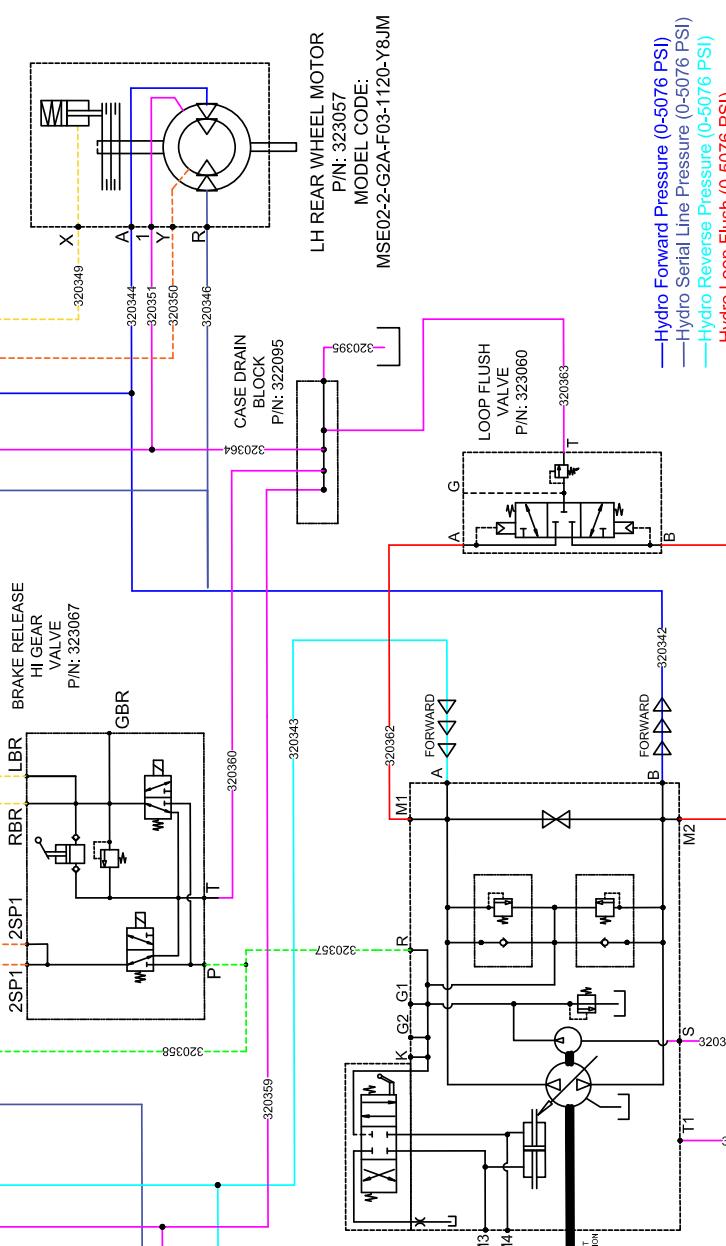


LH FRONT WHEEL MOTOR
PIN: 323055
MODEL CODE:
MGE02-2-G1A-W10-A121-Y8JM

HYDROSTAT - PM30 POCLAIN - PIN: 323054
PROPULSION PUMP - 1.53 CID (25 cc/rev)
CHARGE PUMP - 0.49 CID (8cc/rev)
MODEL CODE:
PM3025S3A0E35R2508A00f3FUESPA



OIL COOLER
PIN: 843006
FILTER HEAD PIN: 322034
FILTER PIN: 322044



LH REAR WHEEL MOTOR
PIN: 323057
MODEL CODE:
MSE02-2-G2A-F03-1120-Y8JM

RH REAR WHEEL MOTOR
PIN: 323058
MODEL CODE:
MSE02-2-D2A-F03-1120-Y8JM

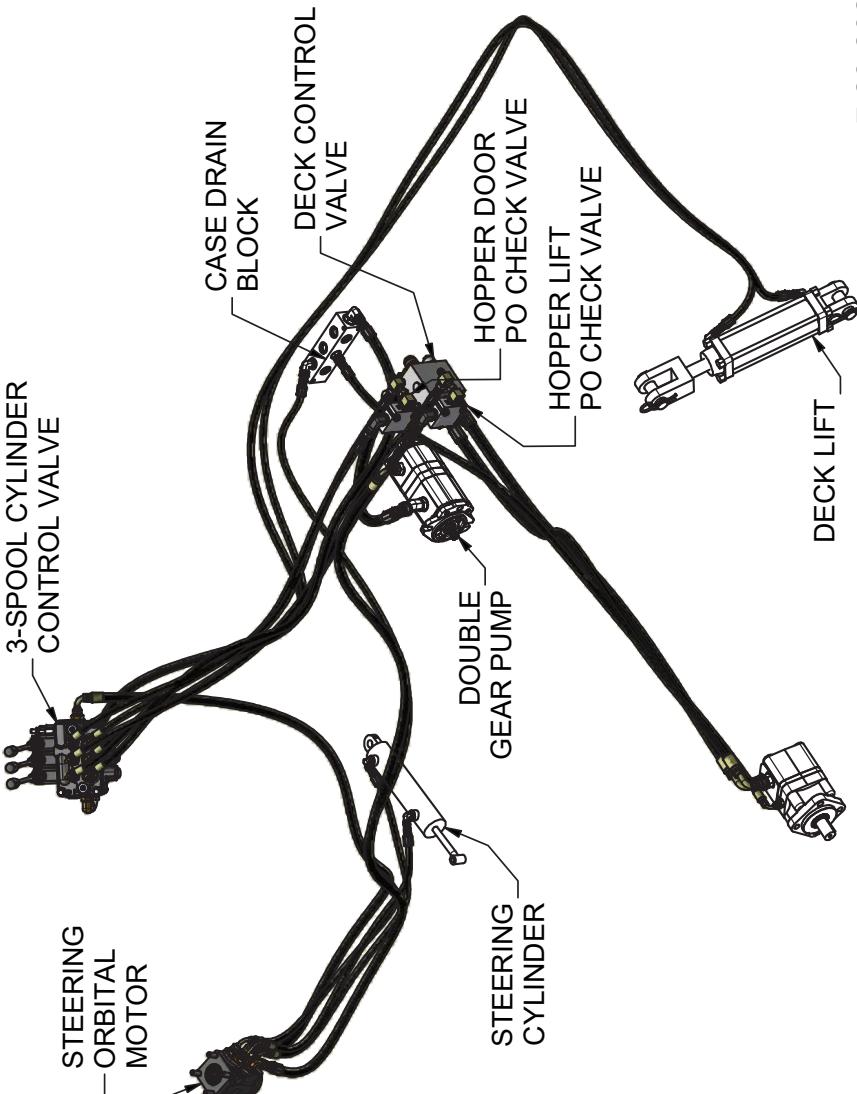
Hydro Forward Pressure (0-5076 PSI)
Hydro Serial Line Pressure (0-5076 PSI)
Hydro Reverse Pressure (0-5076 PSI)
Hydro Loop Flush (0-5076 PSI)
Charge Pressure (0-400 PSI)
Brake Release Pressure (0-400 PSI)
Hi Gear Pressure (0-400 PSI)
Oil Drain / Suction (0-75 PSI)

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06/05/20

MACHINE HYDRAULIC INSTALLATION

Parts List				Parts List			
ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION
1	8	110264	BOLT, 10-24 X .5 STAINLESS, PHILLIPS	39	1	502087	Cap, Center Steering
2	6	110290	NUT, 1/4-20 WIZ FLANGE	40	1	502088	Nut, Steering Wheel, 13/16-20 UNEF
3	2	110434	BOLT, 1/4-20 X 0.5, WIZ FLANGE	41	1	552002	STEERING WHEEL
4	4	110437	BOLT, 3/8-16 X 0.75, WIZ FLANGE	42	1	820158	DECK VALVE
5	4	110474	BOLT, 1/4-20 X 1-1/2				
6	2	110529	BOLT, 5/16-18 X 4.5				
7	4	110588	NUT, 1/2-13 WIZ FLANGE				
8	5	110606	NUT, 5/16-18 WIZ FLANGE				
9	4	110640	Hex Nut M10				
10	4	110645	NUT, 3/8-16 WIZ FLANGE				
11	4	110689	WASHER, 10mm LOCK				
12	8	110999	Nut, 10-24 UL-Type, 025"- 125" panel				
13	4	111055	STUD, M10 X 1.5 X 42 GRADE 8.8				
14	3	111151	Hex Cap 5-16x2_1.4 UNC				
15	4	112070	Bolt, 1/2-13 X 1.25 in Carriage				
16	4	120092	ADAPTER, 6MJ-6MJ-6MB				
17	1	120134	ADAPTER, 6MJ-8MB90				
18	1	120143	ADAPTER, 12MJ-10MB				
19	2	120216	ADAPTER, 6MJ-6F-JX-6MJ				
20	2	120222	ADAPTER, 6MJ-6MB90				
21	1	120239	ADAPTER, 6MJ-8MB				
22	2	120249	ADAPTER, 4MJ-6MB				
23	1	120251	ADAPTER, 10MJ-10MB				
24	1	120319	ADAPTER, 6MJ-6MB				
25	2	120398	ADAPTER REST 6MJ-6MB, .047				
26	2	120446	ADAPTER, 8MJ-10MB				
27	2	120689	Adapter, 6MB90-6FB				
28	6	120739	ADAPTER, 4MJ-8MB				
29	2	130012	CLAMP, ADEL AC28-265 HOLE				
30	1	302079	COLUMN ASSY, TILT STEERING				
31	1	311726	MOUNT, STEERING COLUMN				
32	2	311737	PLATE, ORBITAL COVER				
33	1	315353	WELDMENT, OPERATOR CONSOLE				
34	2	322074	VALVE, PO CHECK				
35	2	322075	VALVE BODY, 3-WAY SAE-6				
36	1	322097	VALVE ASSY, THREE SPOOL				
37	1	323046	MOTOR, STEERING ORBITAL				
38	1	323062	HOSE KIT, HAWK MACHINE HYDRAULIC				

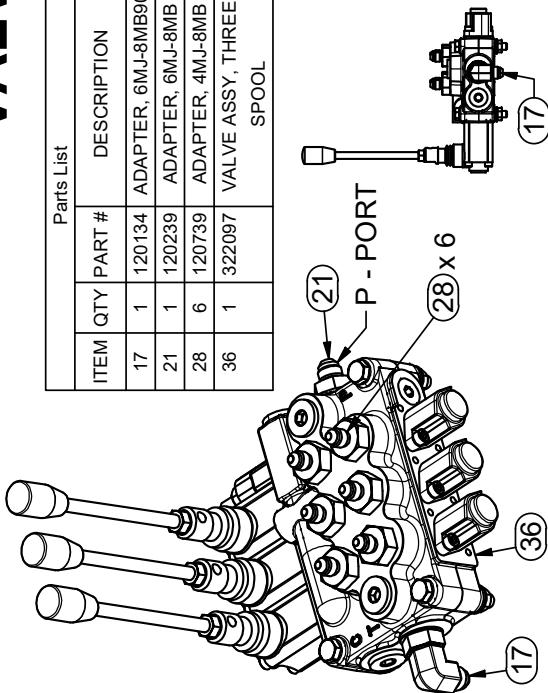


HYDRAULIC SCHEMATIC
SHOWN ON PAGE 10

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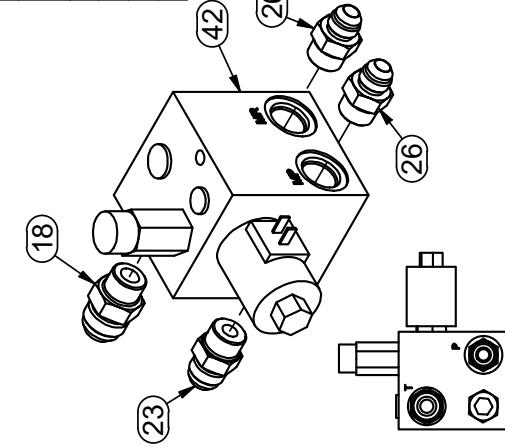
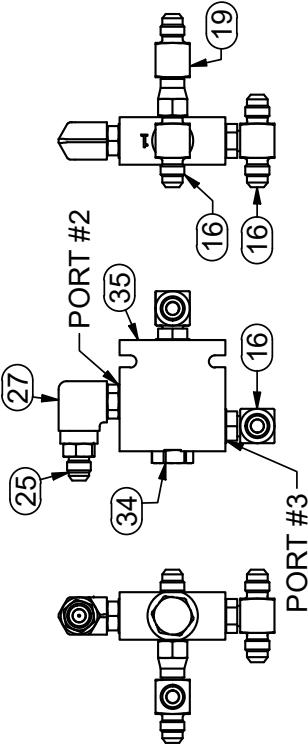
Three Spool Valve Assembly**VALVE ASSEMBLIES**

Parts List			
ITEM	QTY	PART #	DESCRIPTION
17	1	120134	ADAPTER, 6MJ-8MB90
21	1	120239	ADAPTER, 6MJ-8MB
28	6	120739	ADAPTER, 4MJ-8MB
36	1	3222097	VALVE ASSY, THREE SPOOL

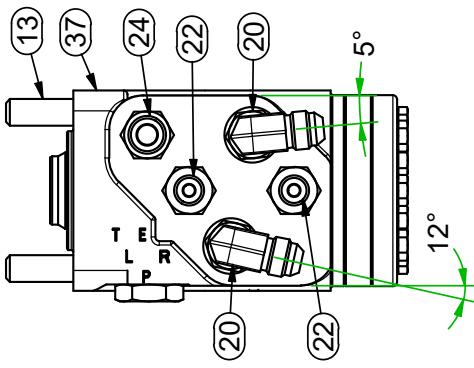
**Deck Valve Assembly**

Parts List			
ITEM	QTY	PART #	DESCRIPTION
18	1	120143	ADAPTER, 12MJ-10MB
23	1	120251	ADAPTER, 10MJ-10MB
26	2	120446	ADAPTER, 8MJ-10MB
42	1	820158	DECK VALVE

820158 - SERVICE PARTS	
PART #	DESCRIPTION
522163	COIL, 12VDC DEUTSCH
820230	VALVE, COUNTER, BALANCE
820231	RELIEF, 3000 PSI PRESSURE
820232	VALVE, N.O. SOLENOID CARTRIDGE

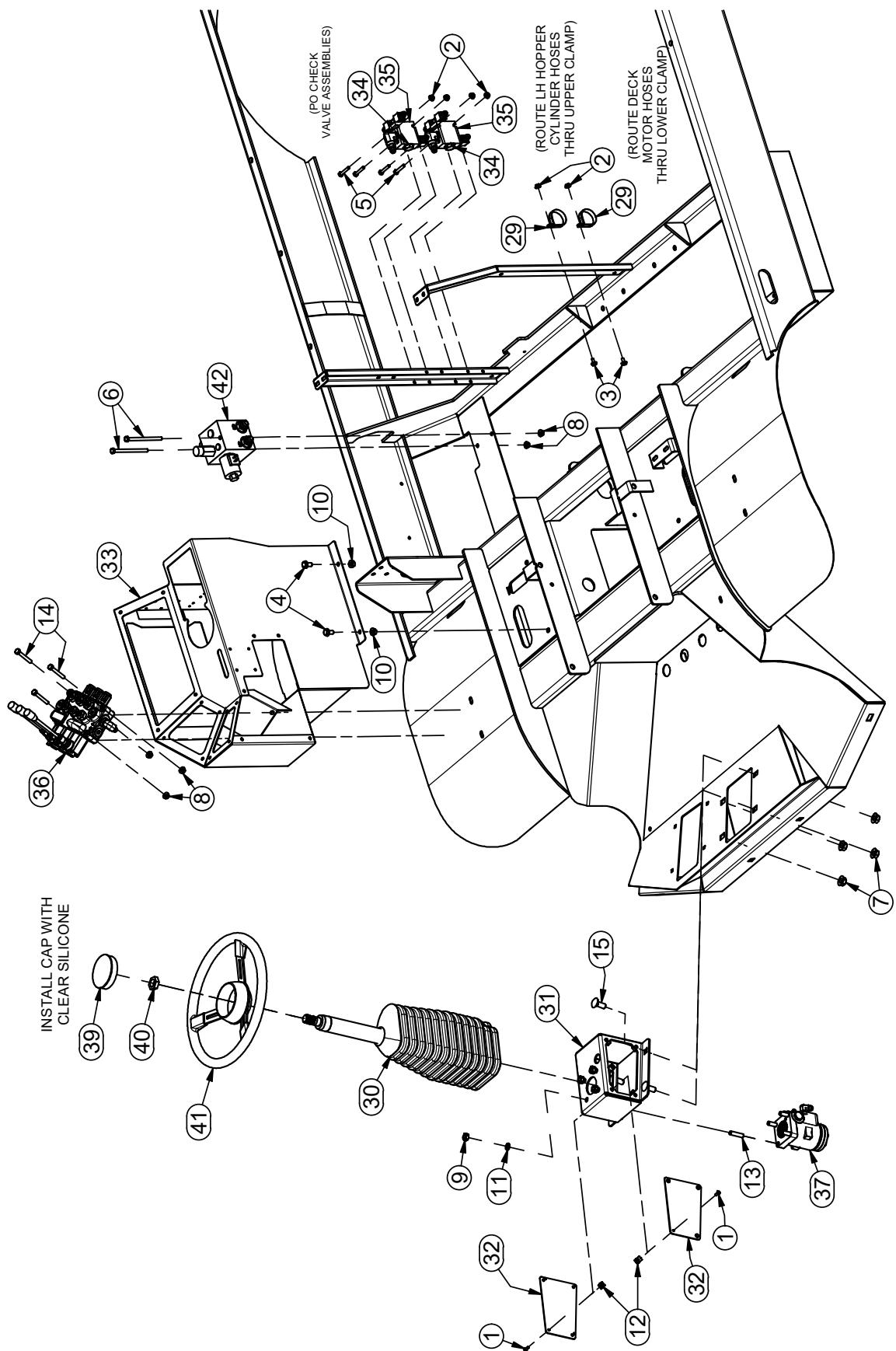
**P.O. Check Valve Assembly X 2**

Parts List			
ITEM	QTY	PART #	DESCRIPTION
16	4	120092	ADAPTER, 6MJ-6MJ-6MB
19	2	120216	ADAPTER, 6MJ-6FJX-6MJ
25	2	120398	ADAPTER, REST 6MJ-6MB, .047
27	2	120689	Adapter, 6MB90-6FB
34	2	3222074	VALVE, PO CHECK
35	2	3222075	VALVE BODY, 3-WAY SAE-6

Steering Orbital Assembly

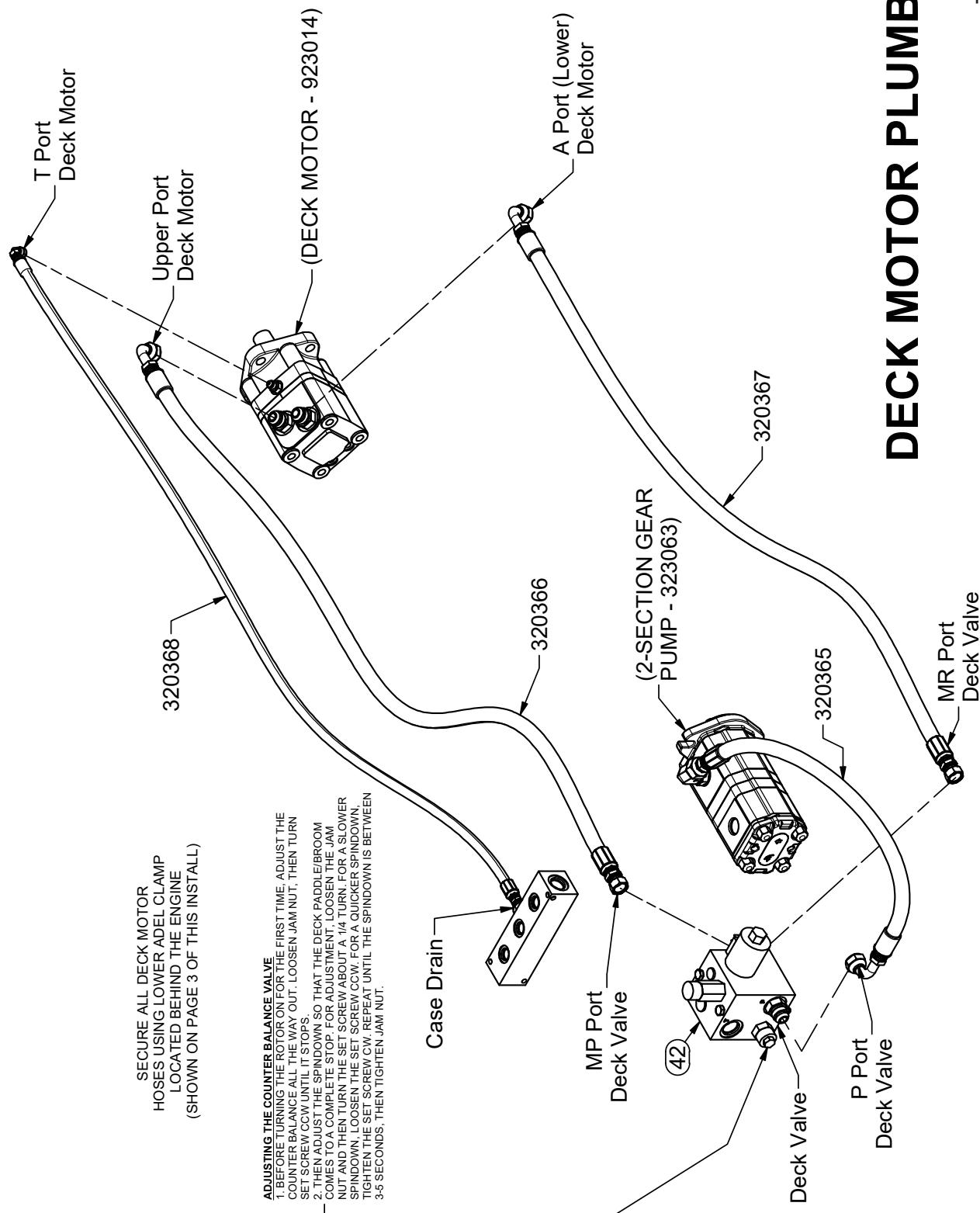
Parts List			
ITEM	QTY	PART #	DESCRIPTION
13	4	111055	STUD, M10 X 1.5 X 42 GRADE 8.8
20	2	120222	ADAPTER, 6MJ-6MB90
22	2	120249	ADAPTER, 4MJ-6MB
24	1	120319	ADAPTER, 6MJ-6MB
37	1	323046	MOTOR, STEERING ORBITAL

7-23-2020



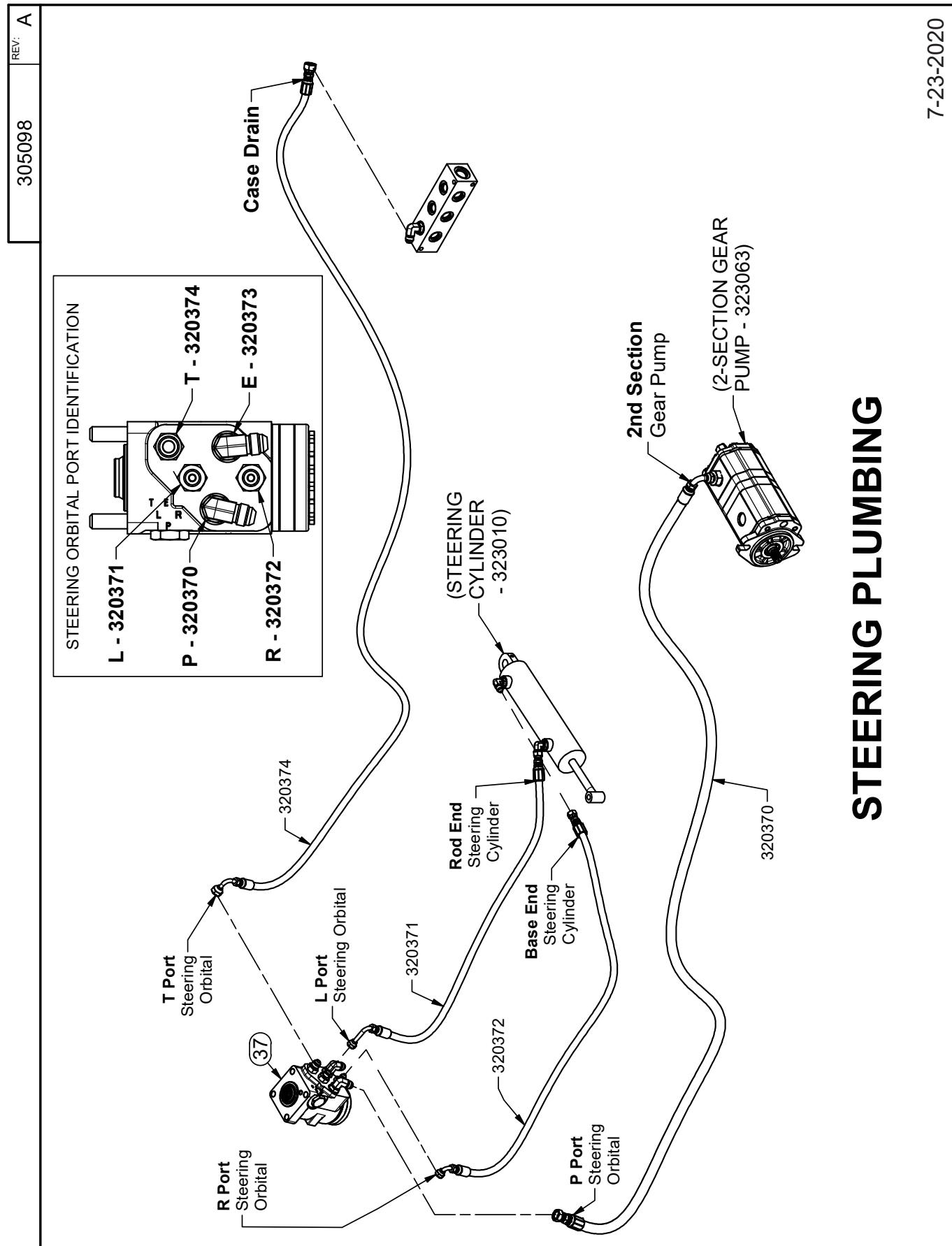
VALVE INSTALLATION

7-23-2020



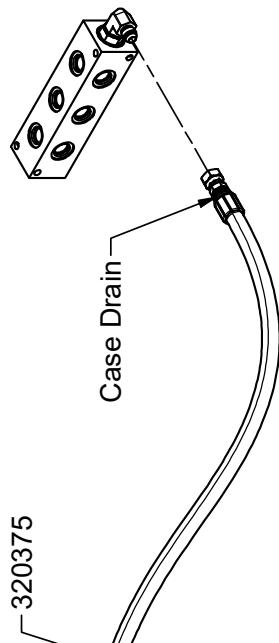
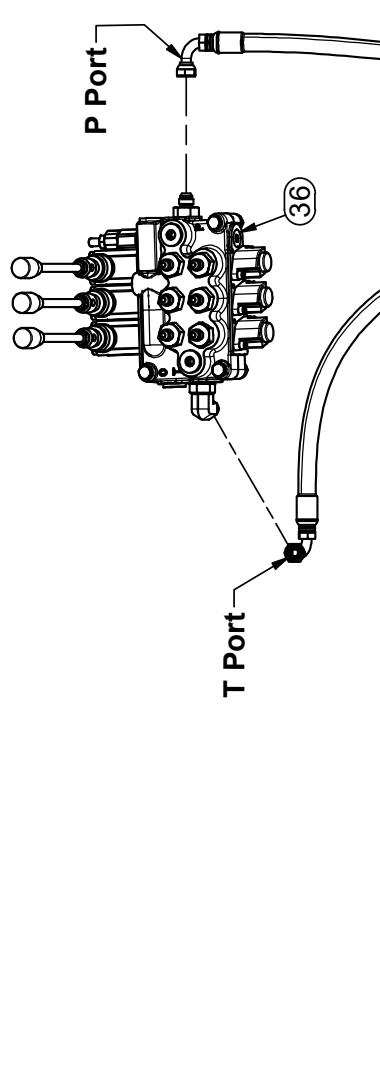
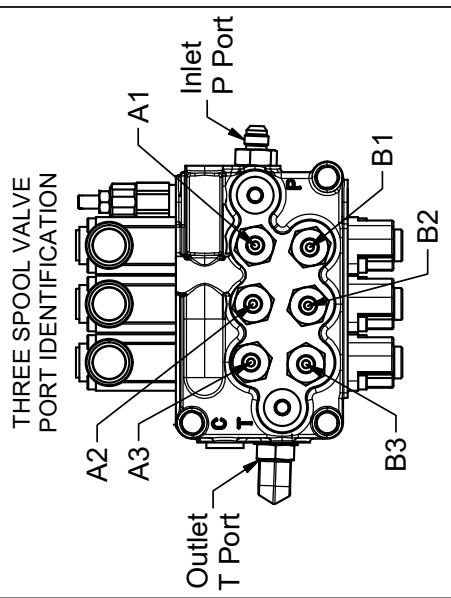
DECK MOTOR PLUMBING

7-23-2020

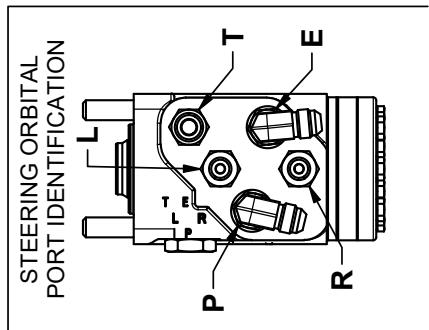


305098

REV: A



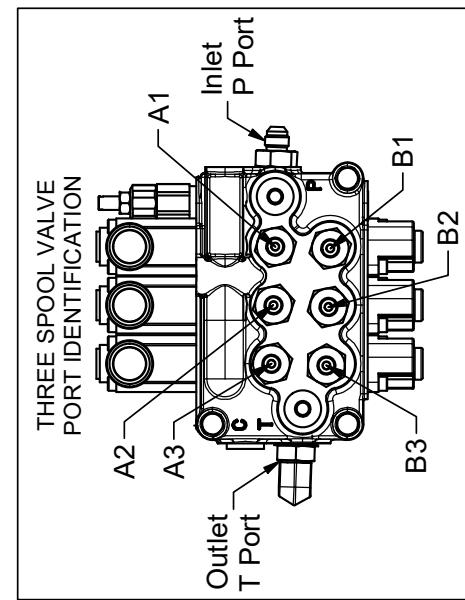
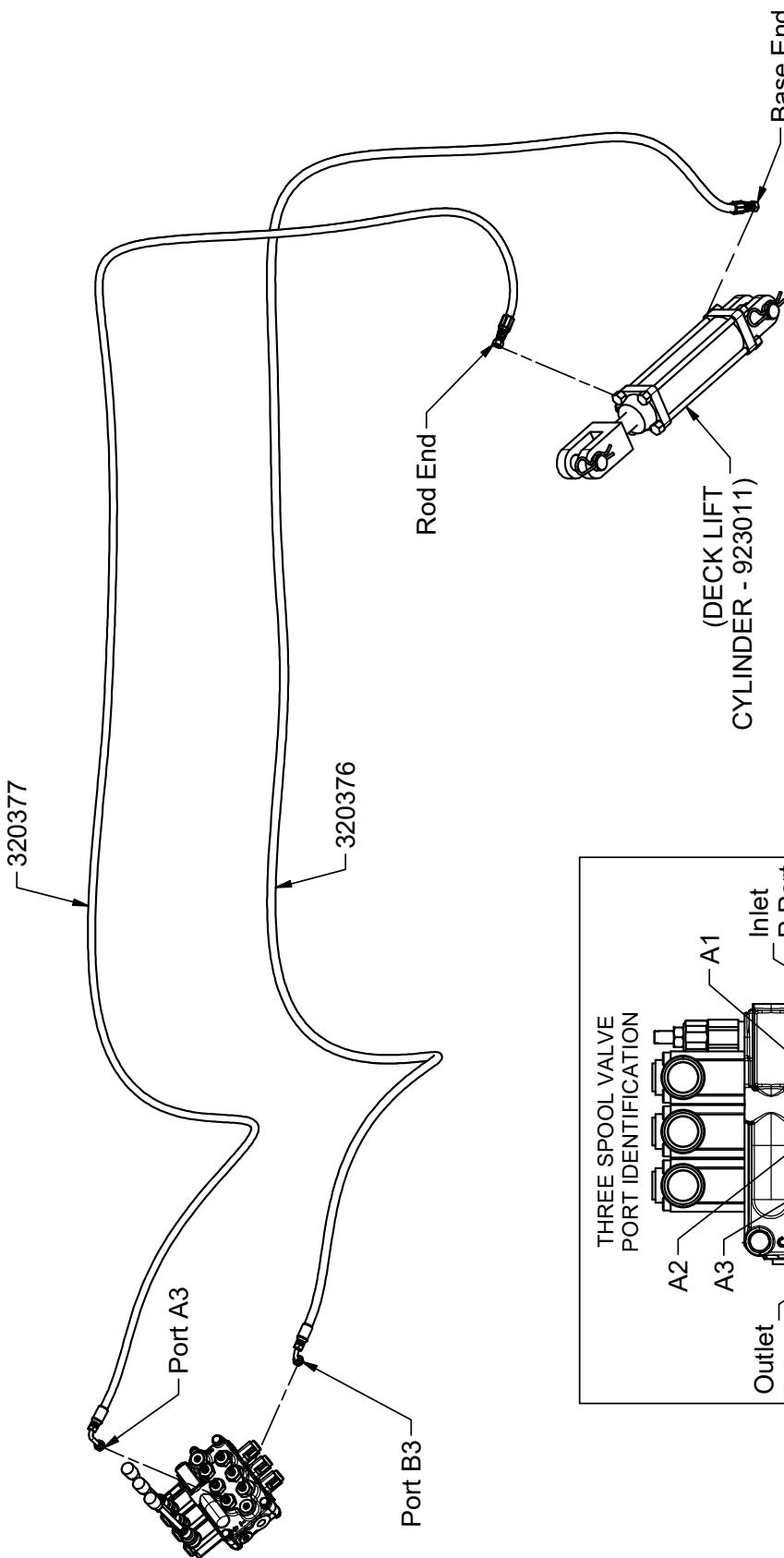
THREE SPOOL VALVE PLUMBING



DECK LIFT PLUMBING

305098

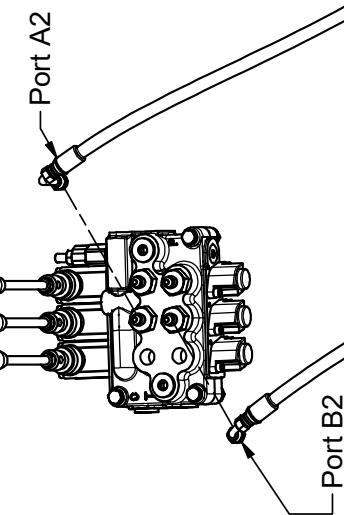
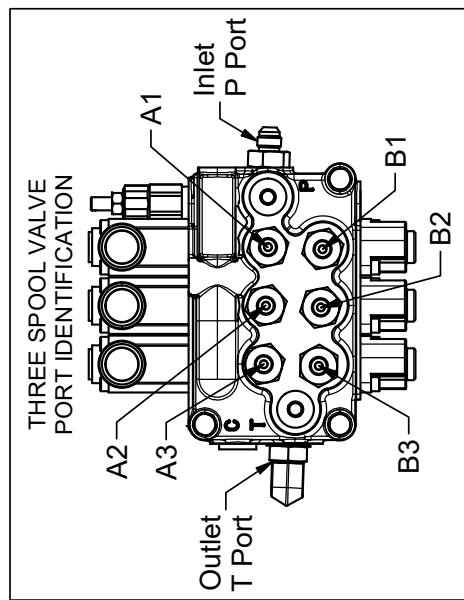
REV: A



7-23-2020

HOPPER LIFT PLUMBING

(CYLINDER PLUMBING CAN BE FOUND IN HOPPER INSTALLATION - 305075)



320379

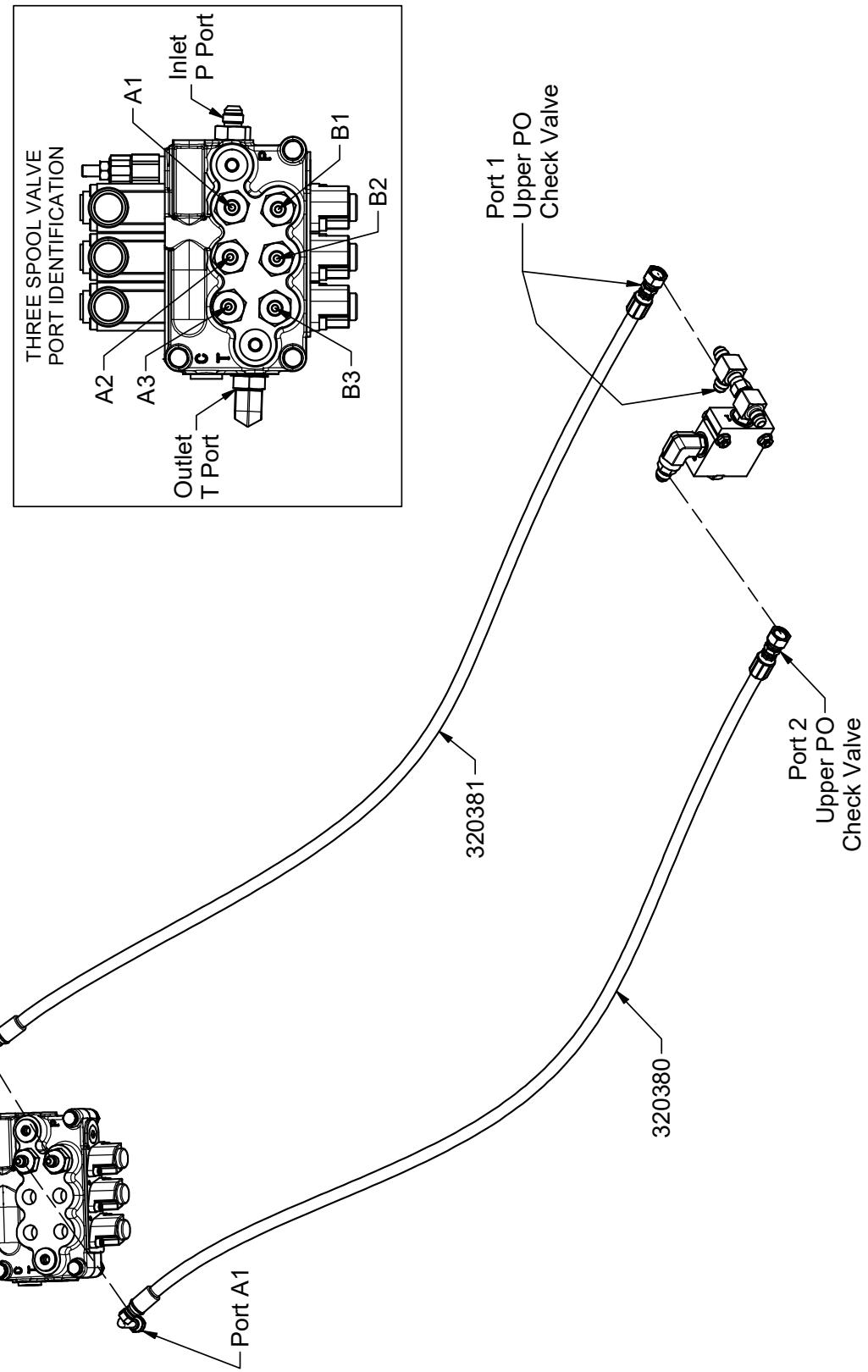
320378

Tee Into Port 1
Lower PO
Check Valve

Port 2
Lower PO
Check Valve

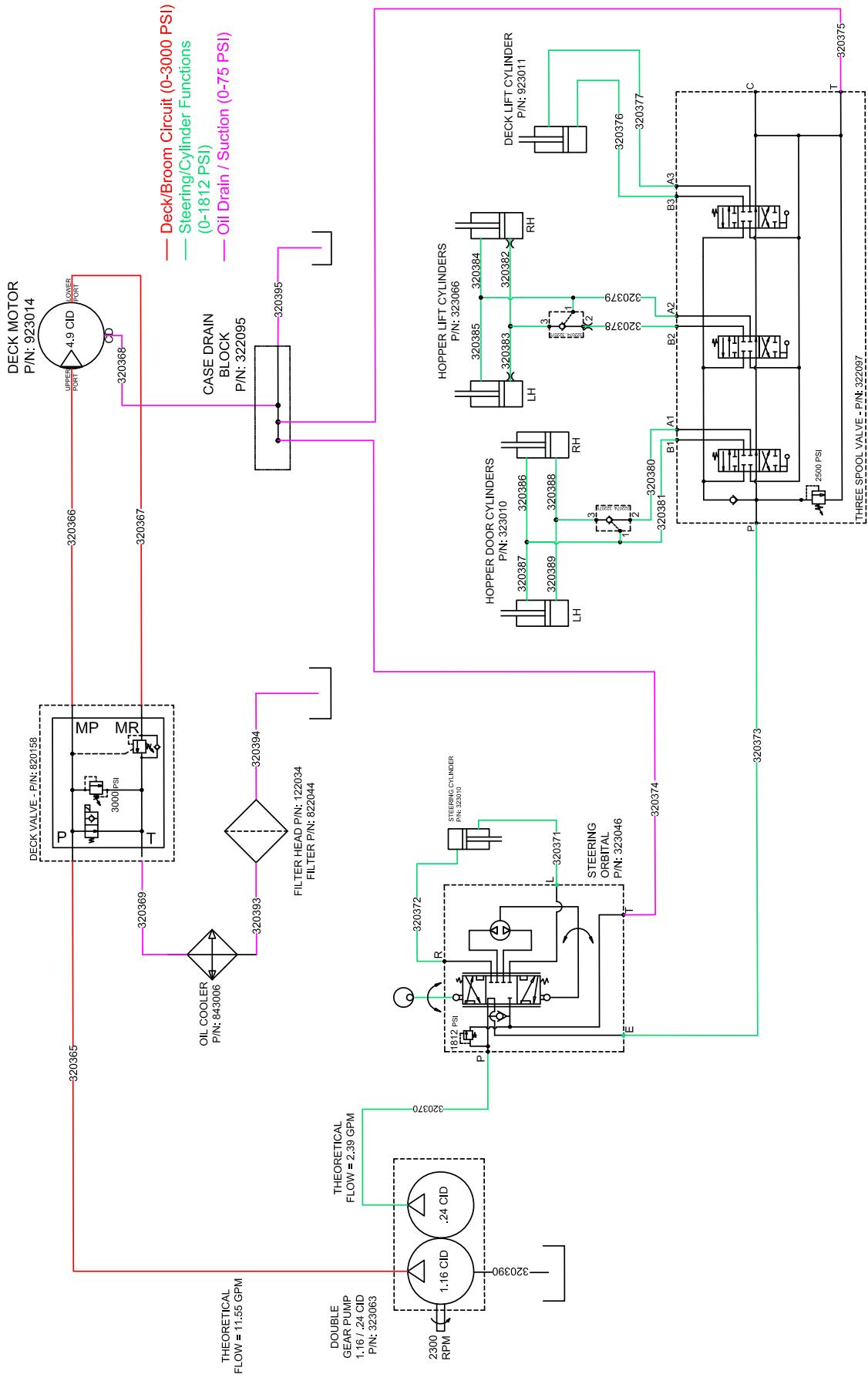
HOPPER DOOR PLUMBING

(CYLINDER PLUMBING CAN BE FOUND IN HOPPER INSTALLATION - 305075)



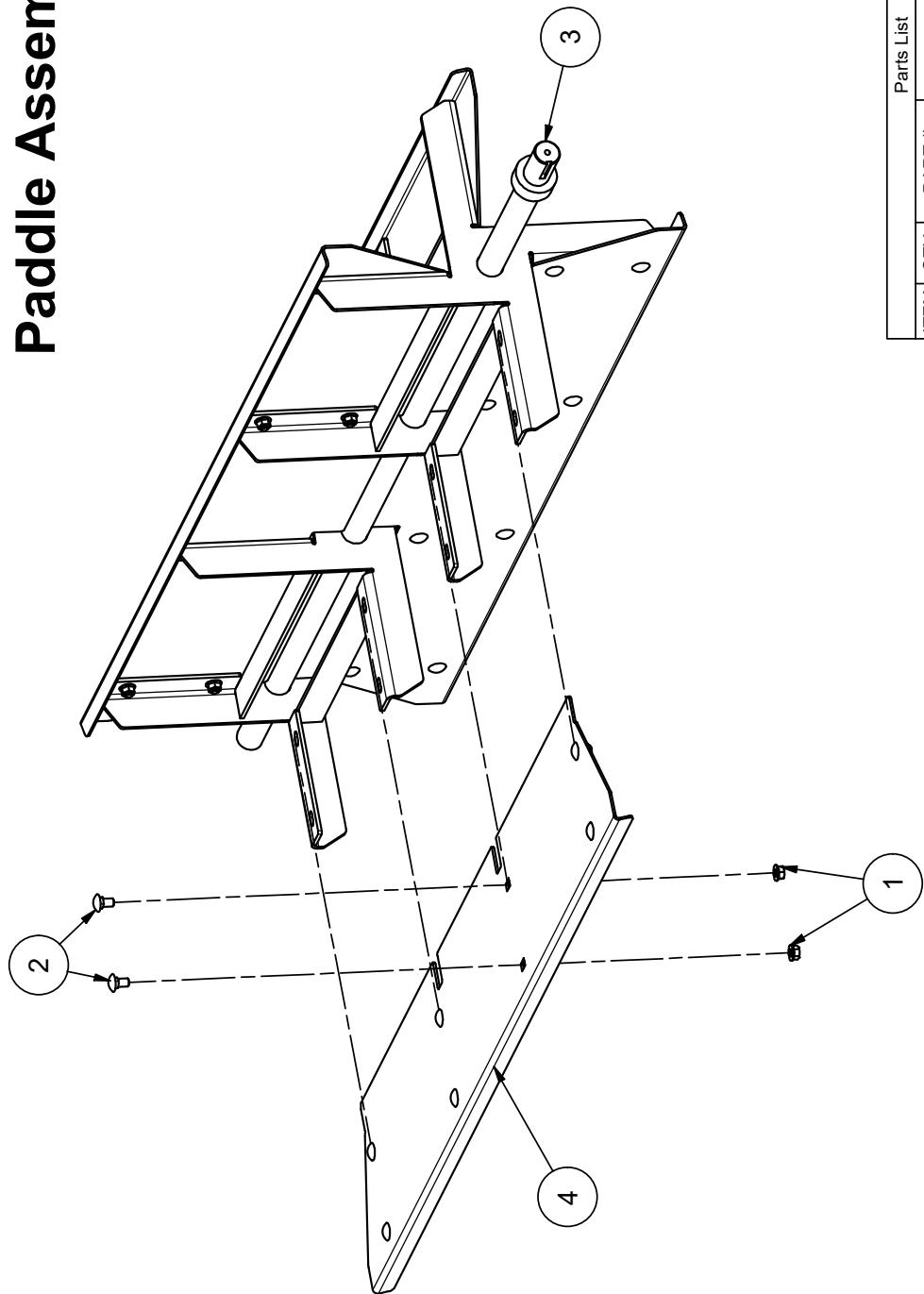
7-23-2020

SWEEPER MACHINE HYDRAULIC SCHEMATIC



06/03/20

Paddle Assembly



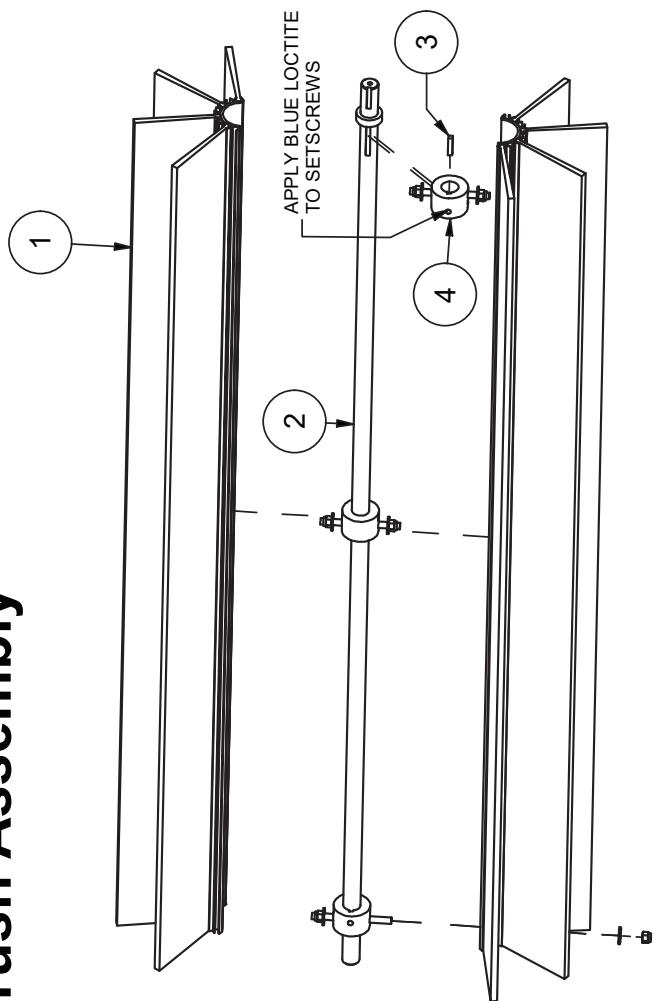
Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	32	110645	NUT, 3/8-16 WIZ FLANGE
2	32	110894	Bolt, 3/8-16 X 0.75 in Carriage
3	1	315345	WELDMENT, PADDLE FRAME
4	4	317180	PADDLE, SWEEPER

7-23-2020

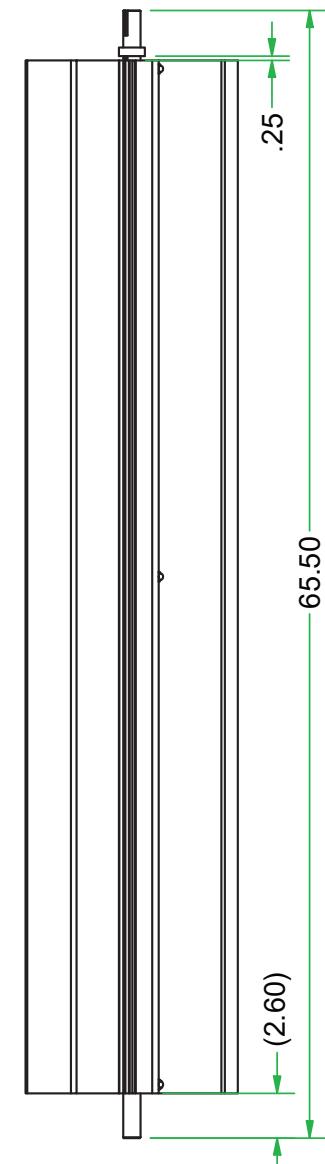
Brush Assembly

305068

Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	1	302003	BRUSH, 60 in
2	1	315368	WELDMENT, BROOM SHAFT
3	1	510089	Key, 1/4 X 1/4 X 1.25, Under
4	3	973002	FLANGE, 2 1/8 X 1, TJ-16



ASSEMBLY NOTE: ENSURE
BRISTLES ARE ALIGNED
WHEN ASSEMBLING TWO HALVES

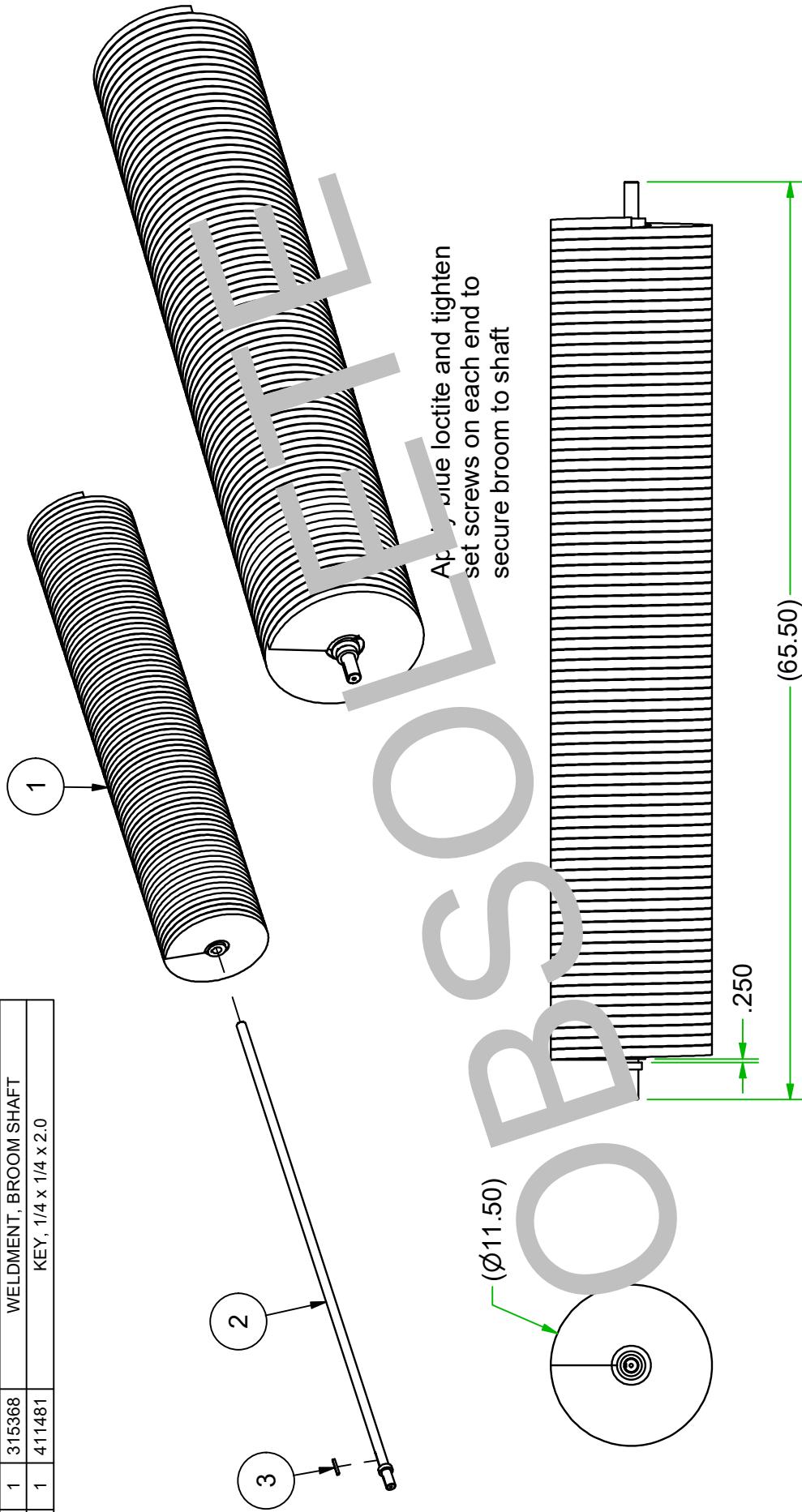


302003 has been replaced by 302170 & 411481.
See the following page for replacement information.

7-23-2020

Brush Assembly

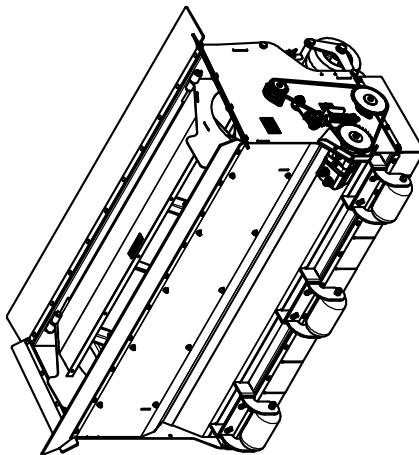
Parts List		
ITEM	QTY	PART #
1	1	302170 Brush, Spiral Wound, 60 x 11.50 OD, .030 Poly
2	1	315368 WELDMENT, BROOM SHAFT
3	1	411481 KEY, 1/4 x 1/4 x 2.0



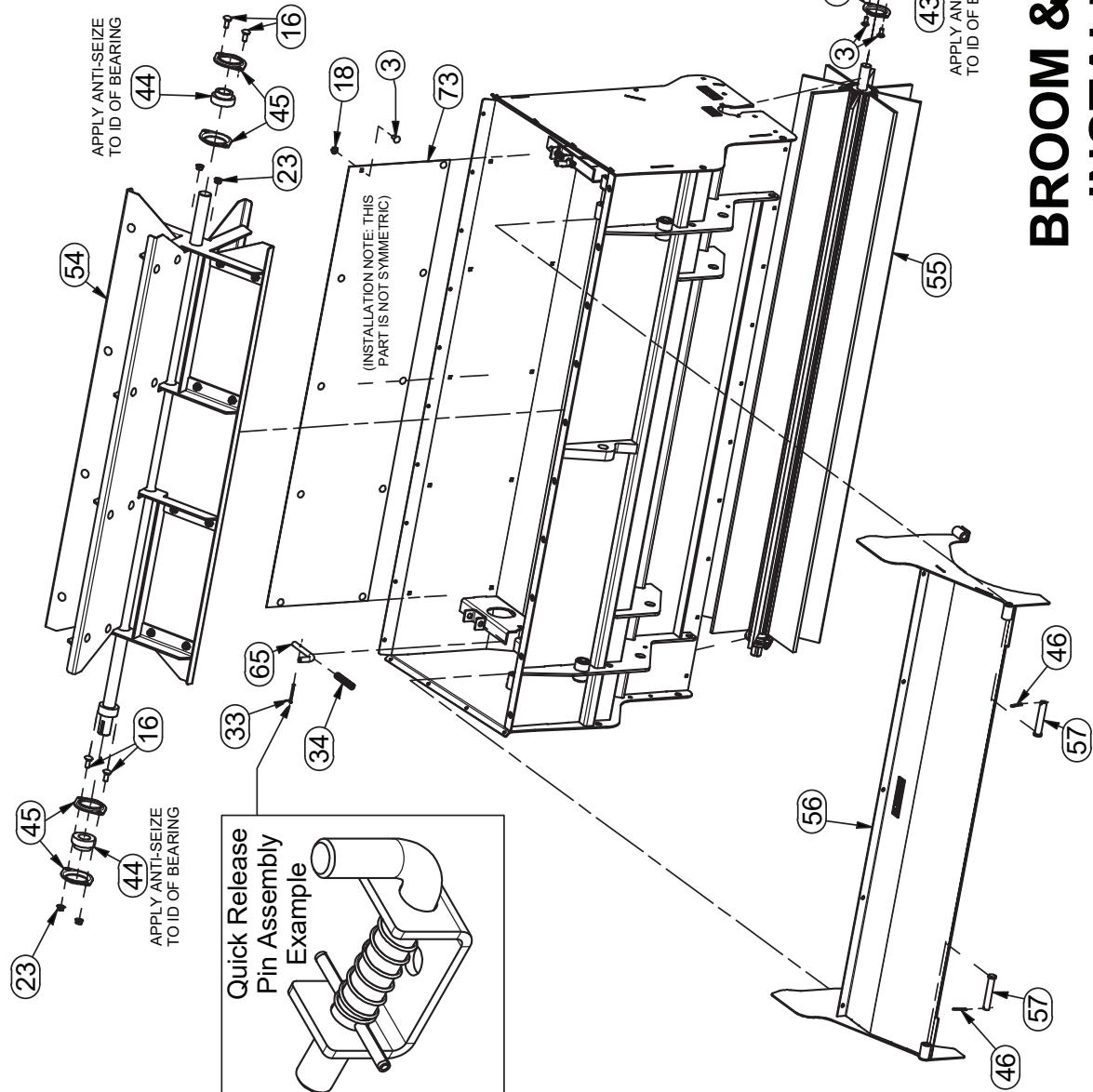
INSTALLED ON THE FOLLOWING
PRODUCTION MACHINES
- HK4200 - SN: 22A05 TO 22A99
- HK4400 - SN: 22A04 TO 22A99

Parts List						Parts List						Parts List					
ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION		
1	1	102133	Decal, ISO, FOOT CRUSH	38	1	142002	SPRING, COMP 1 1/4 X 4 X .148	71	2	317289	RETAINER, UPPER SIDE SEAL						
2	3	110010	BOLT, 1/2-13 X 9.0	39	1	142013	Sprocket, 40/17 Idler, 5/8 Flange, 52mm, 2 Bolt	72	1	317295	COLLAR, SPRING TENSIONER LINER, DECK						
3	14	110020	Bolt, 5/16-18 X 0.75 in Carriage	40	4	142019	SPROCKET, 40BS35 X 1.0	73	1	317311	SHIELD, BROOM BEARING						
4	2	110023	BOLT, 5/8-11 X 6.5	41	2	142023	SPROCKET, 40BS17 X 1.25	74	1	317337	ROLLER CHAIN, #40 DECK (53")						
5	4	110024	BOLT, 5/8-11 X 8.0	42	1	142024	Bearing, 52mm Spherical O.D., 1.0 ID	75	1	340013	ROLLER, ANTI-SCALP						
6	56	110154	Bolt, 1/4-20 X 0.75 in Carriage	43	2	142025	Bearing, 62mm Spherical O.D., 1.25 ID	76	3	510047	KEY, 1/4 X 1/4 X 1.0 UNDER						
7	2	110272	BOLT, 3/4-10 X 6.75, Hhcs Gr 5 Zinc	44	2	142026	Bearing, 62mm Spherical O.D., 1.25 ID	77	2	510228	CASTER WHEEL ASSY, 9 X 3.5-4 Flange, 62mm, 2 Bolt						
8	56	110290	NUT, 1/4-20 WIZ FLANGE	45	4	142027	COTTER PIN, 5/32 X 1	78	2	510237	COTTER PIN, 1/8 X 0.75						
9	2	110304	PIN, LOCK 3/8 X 2.5 SQ	46	2	200029	SKIRT, FRONT DECK	79	1	510249	BUSHING, IGUS, FOOT PEDAL						
10	1	110335	WASHER, 1" FLAT MACHINE	47	1	302112	SKIRT, REAR DECK	80	4	800128	DECAL, DO NOT REMOVE SHIELD						
11	1	110403	BOLT, 1/2-13 X 2.5	48	1	302113	SKIRT, SIDE DECK	81	1	902230	DECAL, SHAFT HAZARD						
12	4	110419	BOLT, 1/2-13 X 1.75	49	2	302114	SEAL, FRONT DECK	82	1	902232	DECAL, HIGH PRESSURE INJECTION						
13	6	110440	BOLT, 3/8-16 X 1, WIZ FLANGE	50	1	302115	SEAL, REAR TRANSITION	83	1	910865	SPACER, 1.125 X .812 X .9375						
14	2	110459	BOLT, 5/16-18 X 1, WIZ FLANGE	51	1	302116	SEAL, SIDE DECK	84	4	923014	MOTOR, 4.9 CID						
15	1	110513	BOLT, 5/8-11 X 2.5	52	2	302117	DECAL, TENSION ADJUSTMENT	85	1								
16	4	110556	Bolt, 3/8-16 X 1 in Carriage	53	1	302146	ASSY, PADDLE	86	1								
17	1	110597	NUT, 5/8-11 HEX	54	1	305067	ASSY, BRUSH	87	1								
18	14	110606	NUT, 5/16-18 WIZ FLANGE	55	1	305068	ASSY, TRANSITION SHIELD, ISO PIN, 5/8" X 3.5"	88	1								
19	4	110610	NUT, 1/2-13	56	1	305102	WELDMENT, SWEEPER DECK	89	1								
20	4	110615	NUT, 1/2-13, UNITORQUE LOCK	57	2	312015	WELDMENT, UPPER WHEEL ADJUST	90	1								
21	2	110625	NUT, 3/4-10, UNITORQUE LOCK	58	1	315312	WELDMENT, LOWER WHEEL MOUNT	91	1								
22	6	110639	NUT, 5/8-11, UNITORQUE LOCK	59	2	315339	WELDMENT, GAUGE WHEEL BRKT	92	1								
23	10	110645	NUT, 3/8-16 WIZ FLANGE	60	2	315340	WELDMENT, SWEEPER DRIVE IDLER	93	1								
24	1	110655	WASHER, 5/8" LOCK	61	2	315341	WELDMENT, IDLER ADJUSTMENT	94	1								
25	8	110658	WASHER, 1/2" FLAT STANDARD	62	1	315377	WELDMENT, ANTI-SCALP WHEEL MOUNT	95	1								
26	1	110663	WASHER, 5/8" FLAT SAE	63	1	315378	RETAINER, FRONT DECK	96	1								
27	4	110666	WASHER, 1/2" LOCK	64	3	315392	RETAINER, SIDE DECK	97	2								
28	4	110678	WASHER, 3/4 FLAT SAE	65	2	317249	SPACER KEYWAY, 1.625 X .5 X .909	98	1								
29	2	110826	NUT, 3/8-16 GR 5	66	4	317252	WASHER, 2.0 X .344 X .12	99	3								
30	1	110929	BOLT, M8-1.25 X 20 WIZ FLNG	67	2	317253	TENSIONER, GEAR MOUNT	100	1								
31	1	111186	WASHER, 1.50 X .406 X .125, FLAT	68	1			101									
32	1	111188	WASHER, 1.25 X 1.875 X .047, FLAT	69	3	317258		102									
33	2	112119	ROLL PIN, 5/32 X 2 ZP	70	1	317261		103									
34	2	112126	SPRING, COMP 3.0L X 0.6 OD X .045 Clevis Pin, 3/8" X 3/4", ZINC					104									
35	1	112130	ADAPTER, 4MJ-4MB					105									
36	1	120233	ADAPTER, 10MJ-10MB					106									
37	2	120251						107									

DECK ASSEMBLY



Parts List				
ITEM	QTY	PART #	DESCRIPTION	
2	3	110010	BOLT, 1/2-13 X 9.0	
3	14	110020	Bolt, 5/16-18 X 0.75 in Carriage	
13	6	110440	BOLT, 3/8-16 X 1, WIZ FLANGE	
16	4	110556	Bolt, 3/8-16 X 1 in Carriage	
18	14	110606	NUT, 5/16-18 WIZ FLANGE	
23	10	110645	NUT, 3/8-16 WIZ FLANGE	
33	2	112119	ROLL PIN, 5/32 X 2 ZP	
34	2	112126	SPRING, COMP 3.0L x 0.6 OD x .045	
40	4	142019	Flange, 52mm, 2 Bolt	
43	2	142025	Bearing, 52mm Spherical O.D., 1.0 ID	
44	2	142026	Bearing, 62mm Spherical O.D., 1.25 ID	
45	4	142027	Flange, 62mm, 2 Bolt	
46	2	200029	COTTER PIN, 5/32 X 1	
53	1	302146	Decal, Tension Adjustment	
54	1	305067	ASSY, PADDLE	
55	1	305068	ASSY, BRUSH	
56	1	305102	Assy, Transition Shield, ISO	
57	2	312015	PIN, 5/8" x 3.5"	
61	2	315341	WELDMENT, GAUGE WHEEL BRKT	
64	3	315392	WELDMENT, ANTI-SCALP WHEEL MOUNT	
65	2	317249	PIN, QUICK RELEASE	
73	1	317311	LINER, DECK	
74	1	317337	Shield, Broom Bearing	
76	3	510047	Roller, Anti-Scalp	



BROOM & PADDLE INSTALLATION

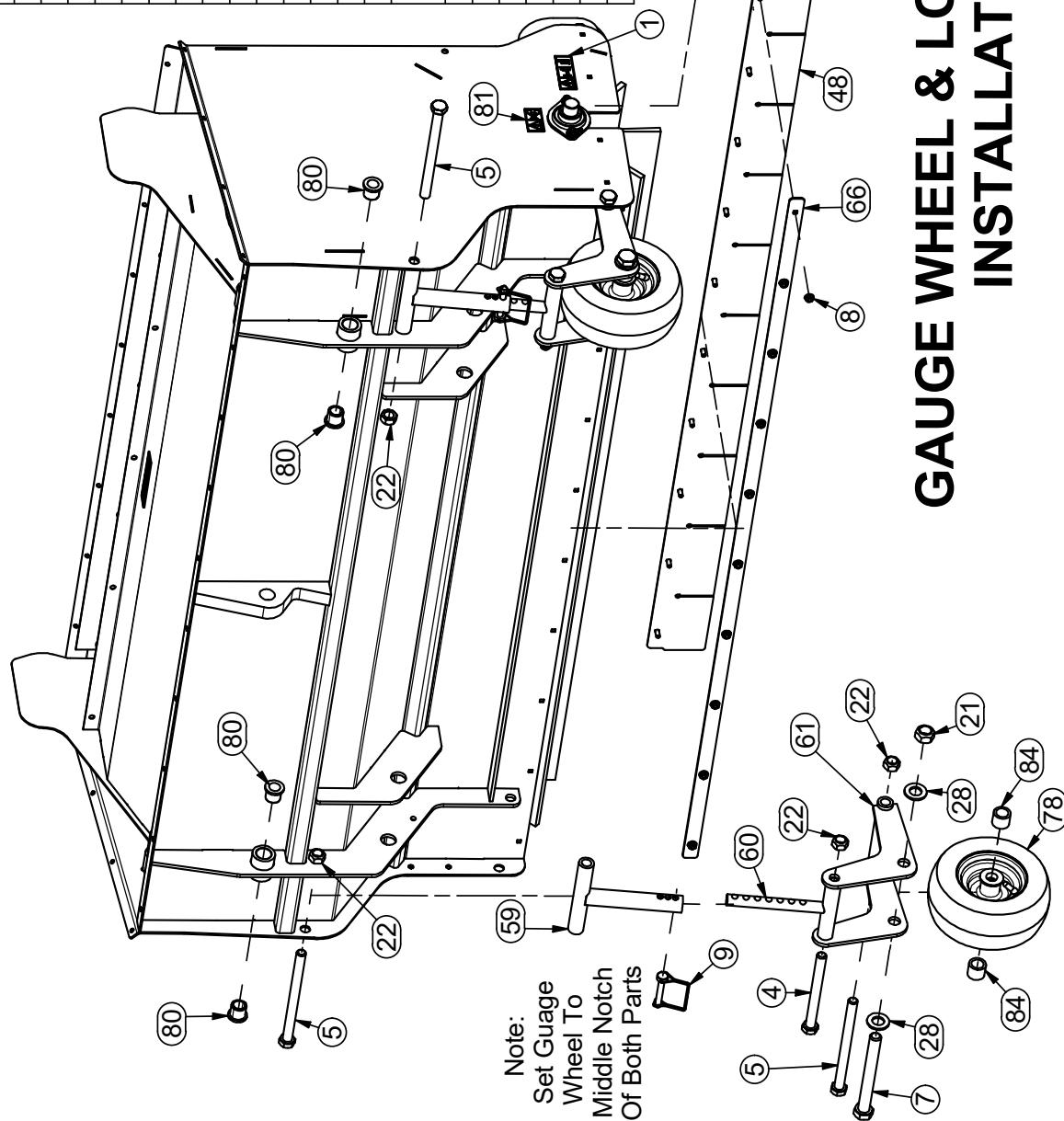
**305068 has been replaced by 305134.
See "Brush Assembly" for reference.**

305066

REV: B

Parts List

ITEM	QTY	PART #	DESCRIPTION
1	1	102133	Decal, ISO FOOT CRUSH
2	3	110010	BOLT, 1/2-13 X 9.0
4	2	110023	BOLT, 5/8-11 X 6.5
5	4	110024	BOLT, 5/8-11 X 8.0
7	2	110272	BOLT, 3/4-10 X 6.75, Hhes Gr 5 Zinc
8	56	110290	NUT, 1/4-20 WIZ FLANGE
9	2	110304	PIN, LOCK 3/8 X 2.5 SQ
13	6	110440	BOLT, 3/8-16 X 1, WIZ FLANGE
21	2	110625	NUT, 3/4-10, UNITORQUE LOCK
22	6	110639	NUT, 5/8-11, UNITORQUE LOCK
28	4	110678	WASHER, 3/4 FLAT SAE
48	1	302113	SKIRT, REAR DECK
49	2	302114	SKIRT, SIDE DECK
53	1	302146	Decal, Tension Adjustment
59	2	315339	WELDMENT, UPPER WHEEL ADJUST
60	2	315340	WELDMENT, LOWER WHEEL ADJUST
61	2	315341	WELDMENT, GAUGE WHEEL BRKT
64	3	315392	WELDMENT, ANTI-SCALP WHEEL MOUNT
66	4	317252	RETAINER, FRONT DECK
67	2	317253	RETAINER, SIDE DECK
76	3	510047	Roller, Anti-Scalp
78	2	510237	CASTER WHEEL ASSY, 9 X 3.5-4
80	4	800128	BUSHING, (IGUS, FOOT PEDAL)
81	1	902228	Decal, Do Not Remove Shield
84	4	910865	SPACER, 1.125 X .812 X .9375

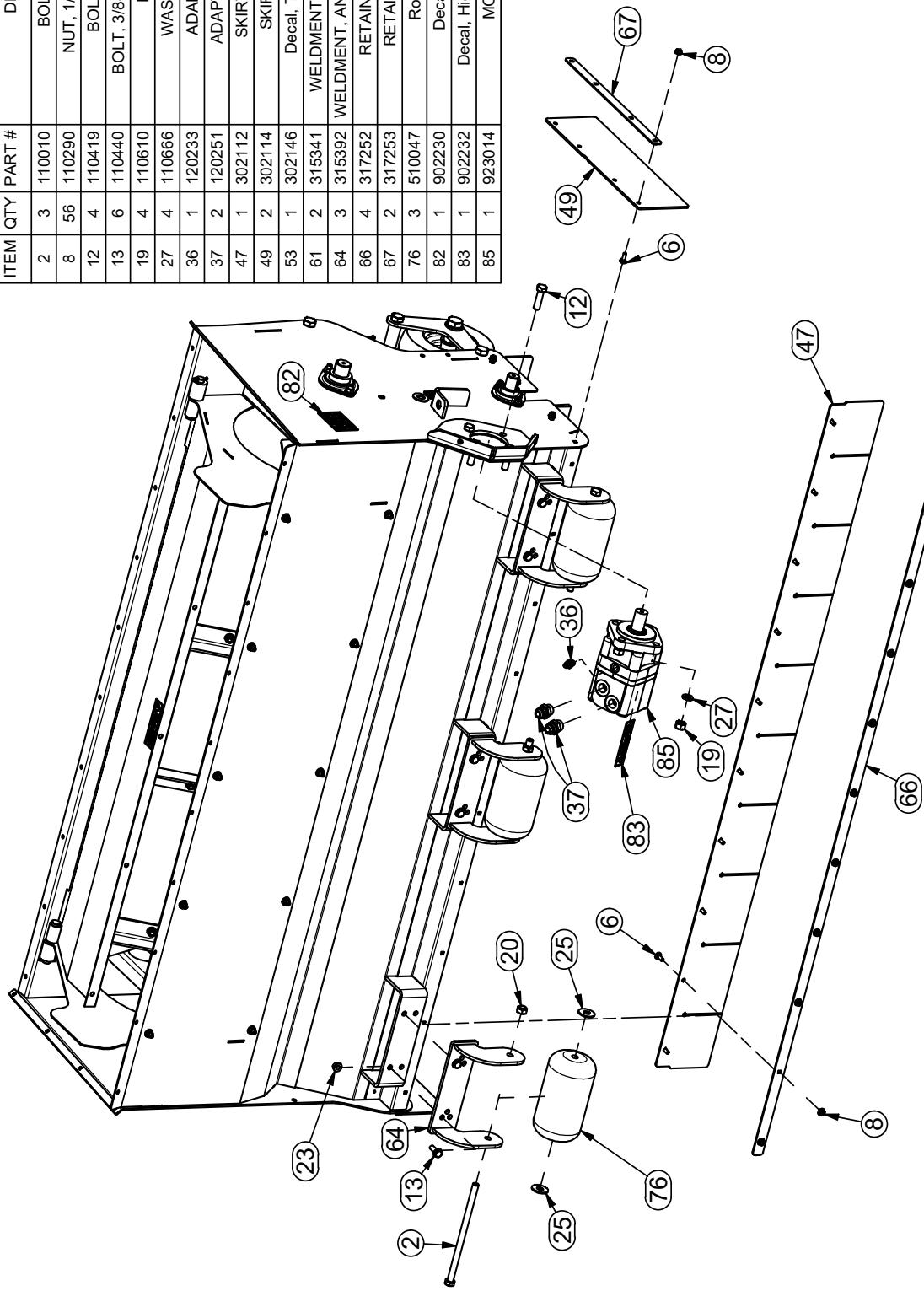


8-3-2020

GAUGE WHEEL & LOWER SKIRT INSTALLATION

HYDRAULIC MOTOR, SCALP WHEELS & LOWER SKIRT INSTALLATION

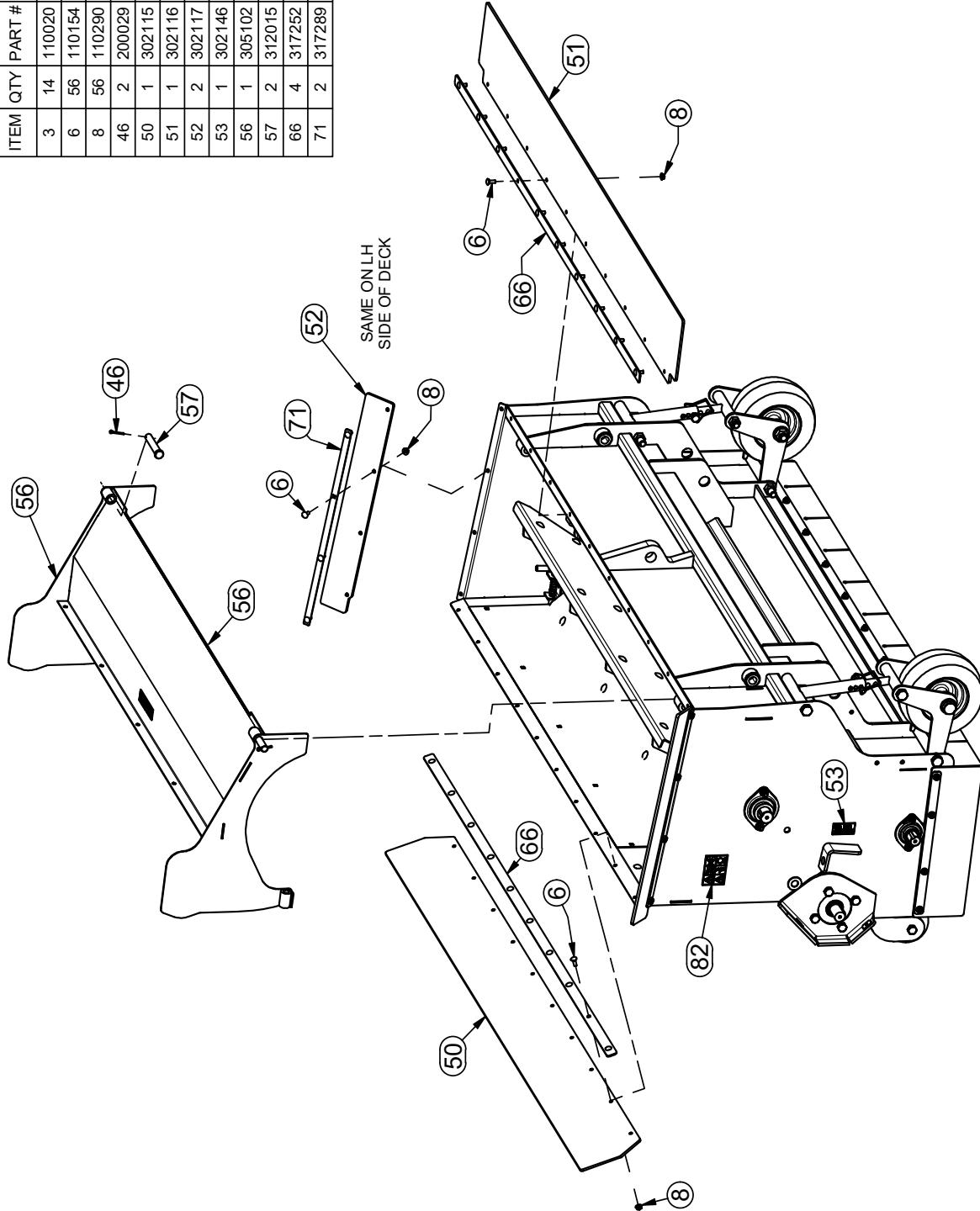
Parts List			
ITEM	QTY	PART #	DESCRIPTION
2	3	110010	BOLT, 1/2-13 X 9.0
8	56	110290	NUT, 1/4-20 WIZ FLANGE
12	4	110419	BOLT, 1/2-13X 1.75
13	6	110440	BOLT, 3/8-16 X 1, WIZ FLANGE
19	4	110610	NUT, 1/2-13
27	4	110666	WASHER, 1/2" LOCK
36	1	120233	ADAPTER, 4MJ-4MB
37	2	120251	ADAPTER, 10MJ-10MB
47	1	302412	SKIRT, FRONT DECK
49	2	302114	SKIRT, SIDE DECK
53	1	302146	Decal, Tension Adjustment
61	2	315341	WELDMENT, GAUGE WHEEL BRKT
64	3	315392	WELDMENT, ANTI-SCALP WHEEL MOUNT
66	4	317252	RETAINER, FRONT DECK
67	2	317253	RETAINER, SIDE DECK
76	3	510047	Roller, Anti-Scalp
82	1	902230	Decal, Shaft Hazard
83	1	902232	Decal, High Pressure Injection
85	1	923014	MOTOR, 4.9 CID



UPPER DECK SEAL & PADDLE SHIELD INSTALLATION

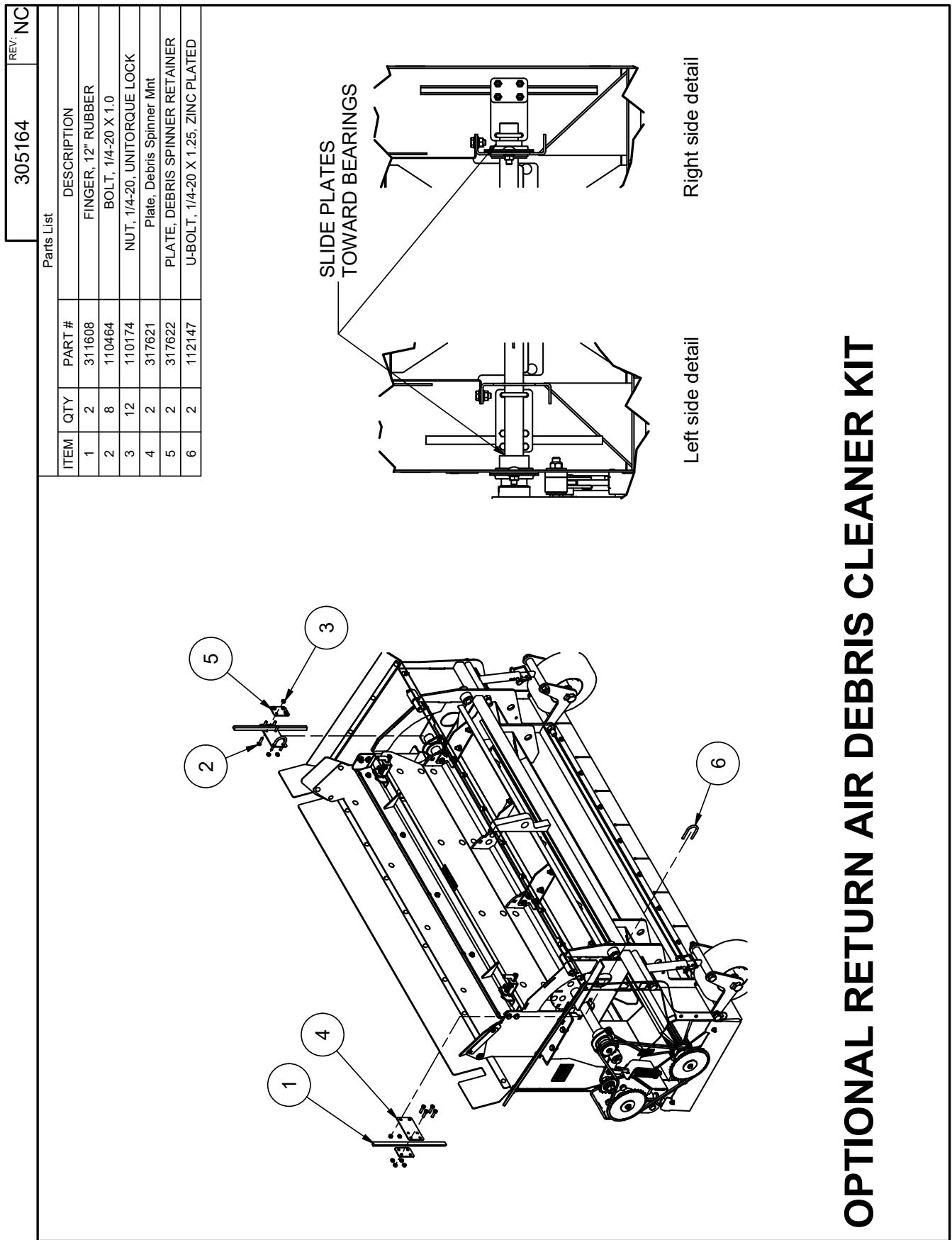
Parts List

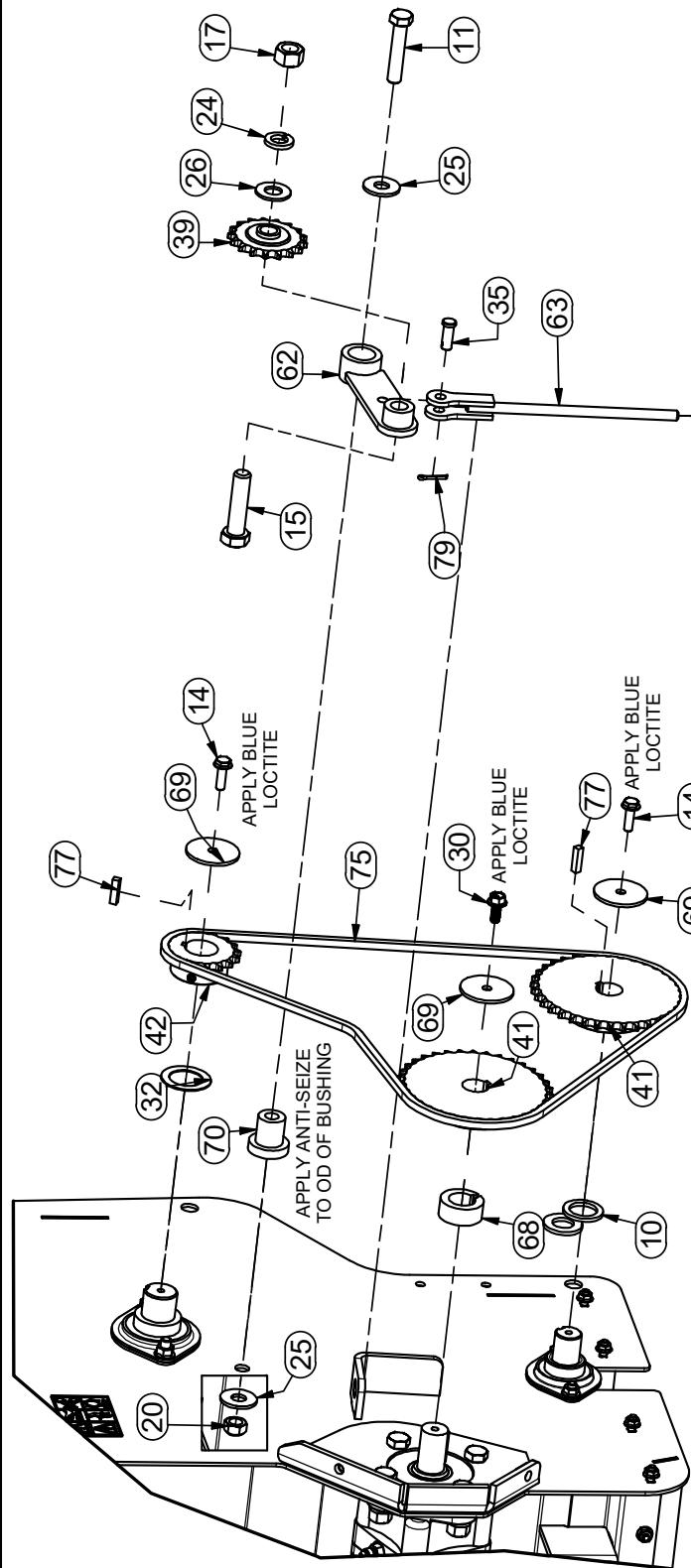
ITEM	QTY	PART #	DESCRIPTION
3	14	110020	Bolt, 5/16-18 X 0.75 in Carriage
6	56	110154	Bolt, 1/4-20 X 0.75 in Carriage
8	56	110290	NUT, 1/4-20 WIZ FLANGE
46	2	200029	COTTER PIN, 5/32 X 1
50	1	302115	SEAL, FRONT DECK
51	1	302116	SEAL, REAR TRANSITION
52	2	302117	SEAL, SIDE DECK
53	1	302146	Decal, Tension Adjustment
56	1	305102	Assy, Transition Shield, ISO
57	2	312015	PIN, 5/8" x 3.5"
66	4	3117252	RETAINER, FRONT DECK
71	2	311289	RETAINER, UPPER SIDE SEAL



8-3-2020

OPTIONAL RETURN AIR DEBRIS CLEANER KIT





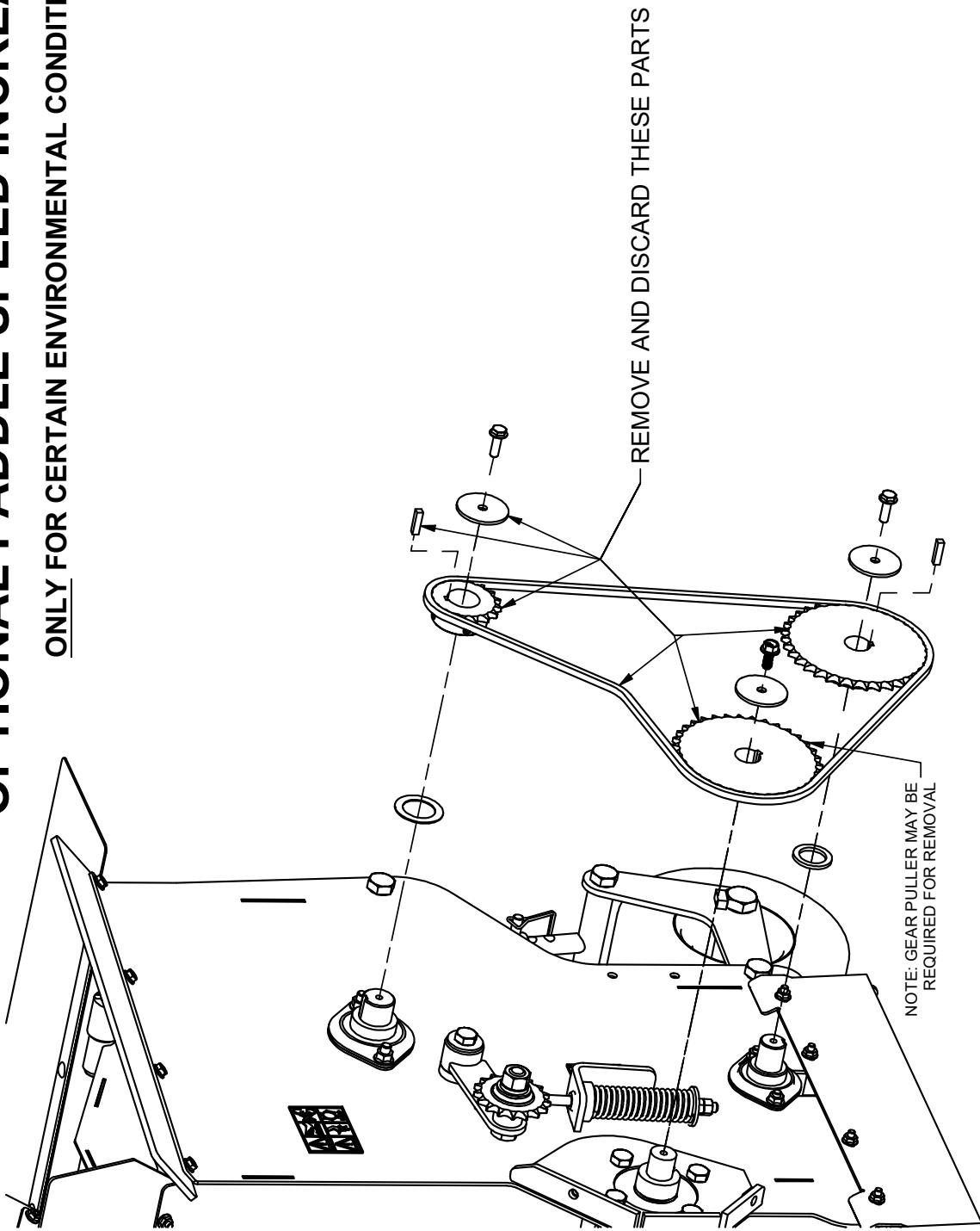
Parts List		Parts List			
ITEM	PART #	DESCRIPTION	ITEM	PART #	DESCRIPTION
2	110010	BOLT, 1/2-13 X 9.0	35	112130	Clevis Pin, 3/8" x 3/4", ZINC
10	110335	WASHER, 1" FLAT MACHINE	38	142002	SPRING, COMP 1 1/4 x 4 x .148
11	110403	BOLT, 1/2-13 X 2.5	39	142013	Sprocket, 4017 idler, 5/8
13	110440	BOLT, 3/8-16 X 1. WIZ FLANGE	41	142023	SPROCKET, 40BS35 X 1.0
14	110459	BOLT, 5/16-18 X 1. WIZ FLANGE	42	142024	SPORCKET, 40BS17 X 1.25
15	110513	BOLT, 5/8-11 X 2.5	53	302146	Decal, Tension Adjustment
17	110597	NUT, 5/8-11 HEX	62	315377	WELDMENT, SWEEPER DRIVE IDLER
20	110615	NUT, 1/2-13, UNIT TORQUE LOCK	63	315378	WELDMENT, IDLER ADJUSTMENT
24	110655	WASHER, 5/8" LOCK	64	315392	WELDMENT, ANTI-SCALP WHEEL
25	110658	WASHER, 1/2" FLAT STANDARD			MOUNT
26	110653	WASHER, 5/8" FLAT SAE	69	317258	WASHER, 2.0 X 344 X .12
28	110678	WASHER, 3/4 FLAT SAE	70	317261	TENSIONER, GEAR MOUNT
29	110826	NUT, 3/8-16 GR 5	72	317295	COLLAR, SPRING TENSIONER
30	110929	BOLT, M8-1.25 X 20 WIZ FLNG	75	340013	ROLLER CHAIN #40 DECK (53")
31	111186	WASHER, 1.50 X .406 X 125, FLAT	76	510047	Roller, Anti-Scalp
32	111188	WASHER, 1.25 X 1.875 X .047, FLAT	77	510228	KEY, 1/4 X 1/4 X 1.0 UNDER
			79	510249	COTTER PIN, 1/8 X 0.75

CHAIN DRIVE ASSEMBLY

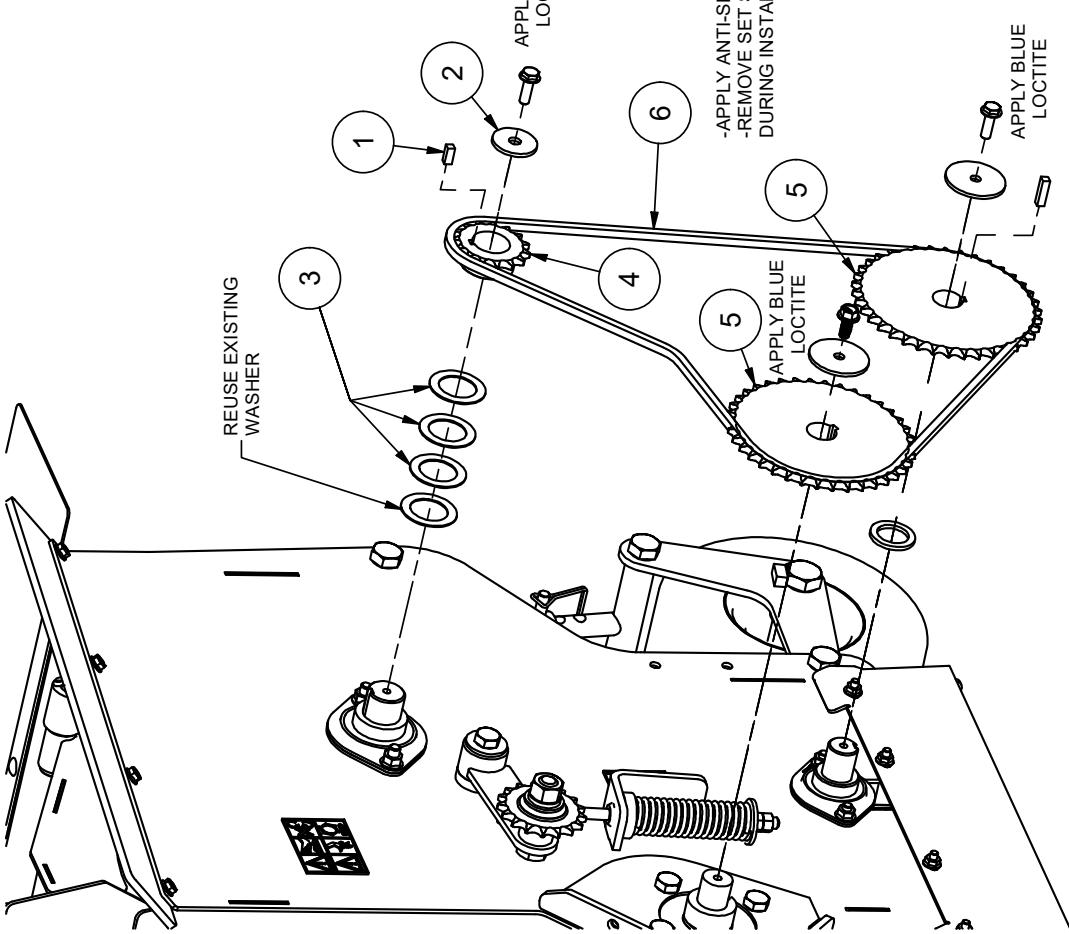
8-3-2020

OPTIONAL PADDLE SPEED INCREASER KIT

ONLY FOR CERTAIN ENVIRONMENTAL CONDITIONS



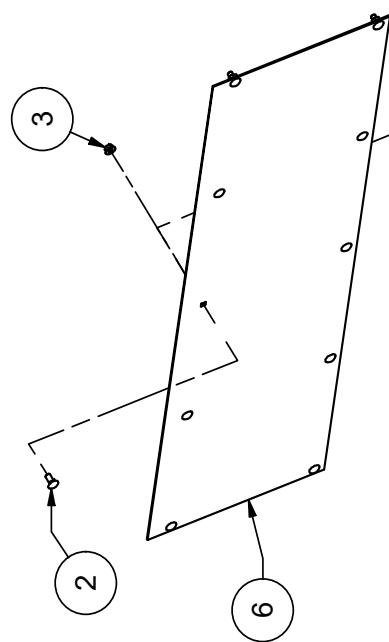
UPDATED COMPONENT INSTALL



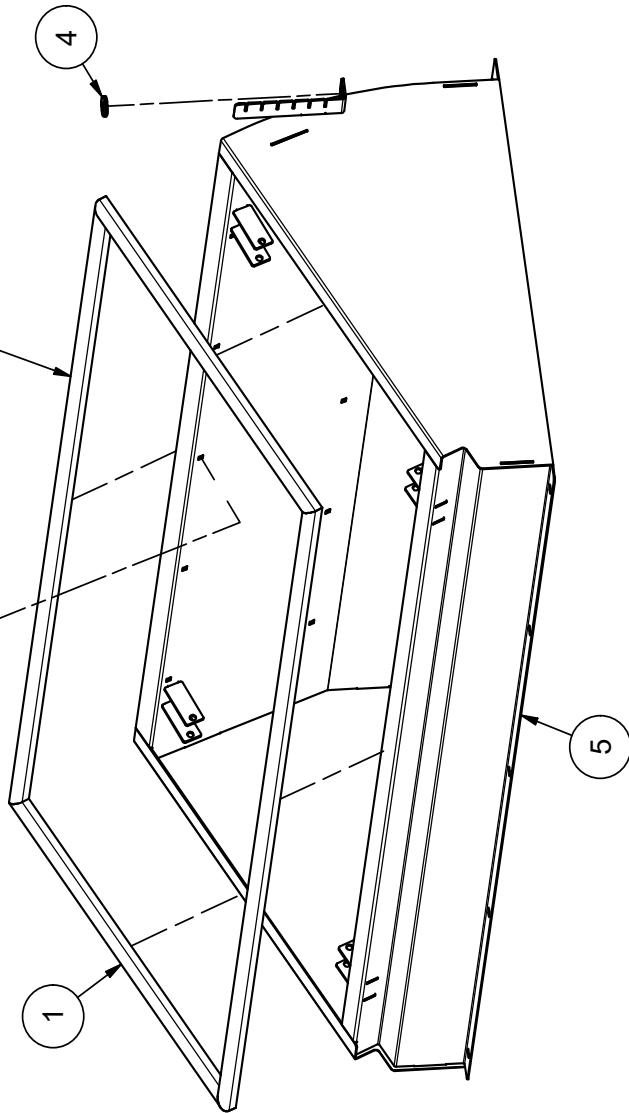
Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	1	110771	KEY, 1/4 X 1/4 X .625 in
2	1	111186	WASHER, 1.50 x .406 x .125, FLAT
3	3	111188	WASHER, 1.25 x 1.875 x .047, FLAT
4	1	142029	SPROCKET, 40BS15 X 1.25
5	2	142030	SPROCKET, 40BS38 X 1.0
6	1	340013	ROLLER CHAIN, #40 DECK DRIVE

DECK TRANSITION ASSEMBLY

Parts List		
ITEM	QTY	PART #
1	15'	102004
2	10	110020
3	10	110606
4	1	110941
5	1	315314
6	1	317311

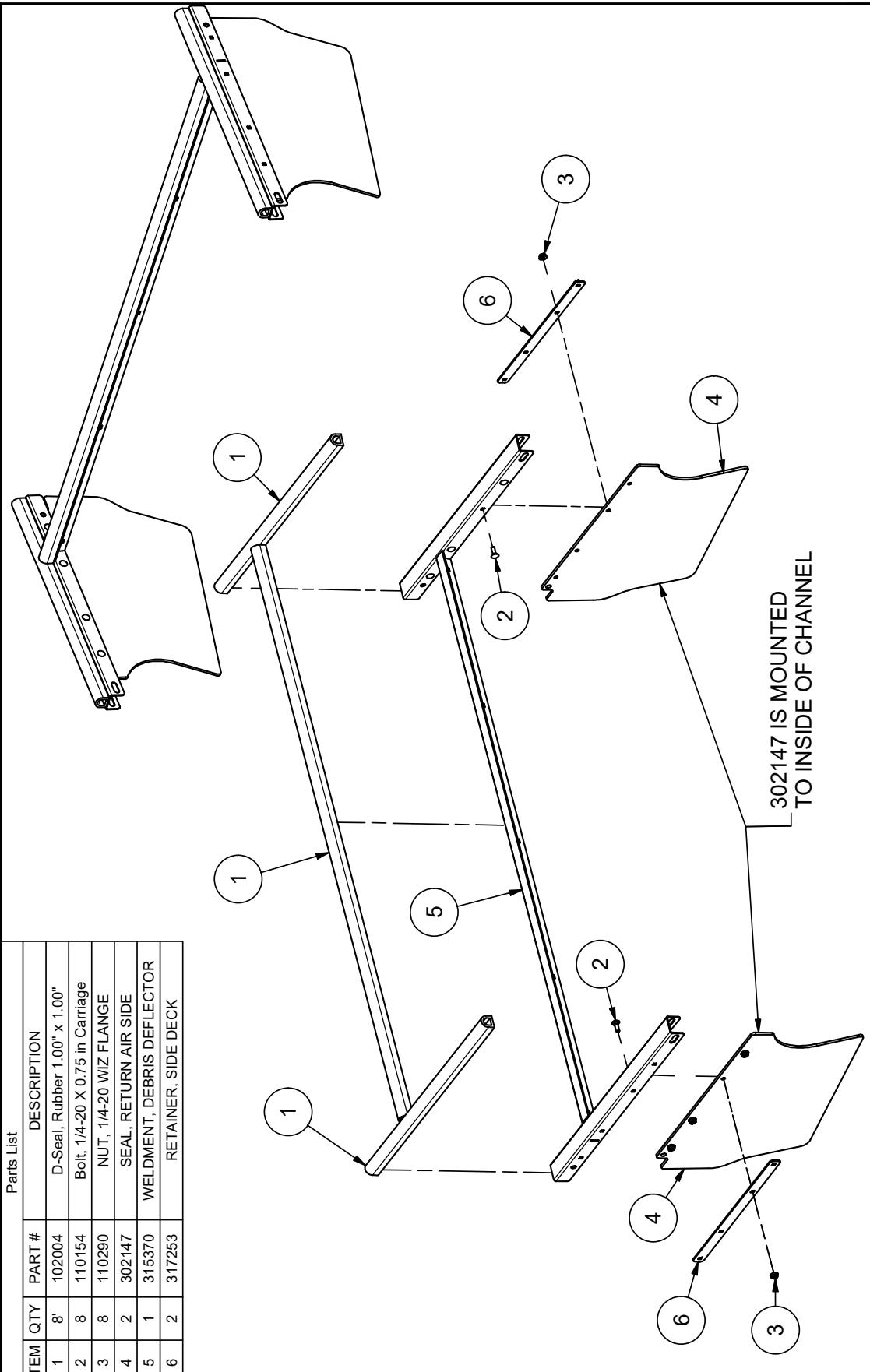


ALIGN SEAL WITH OUTER EDGES
OF SWEEPER TRANSITION WELDMENT



305070

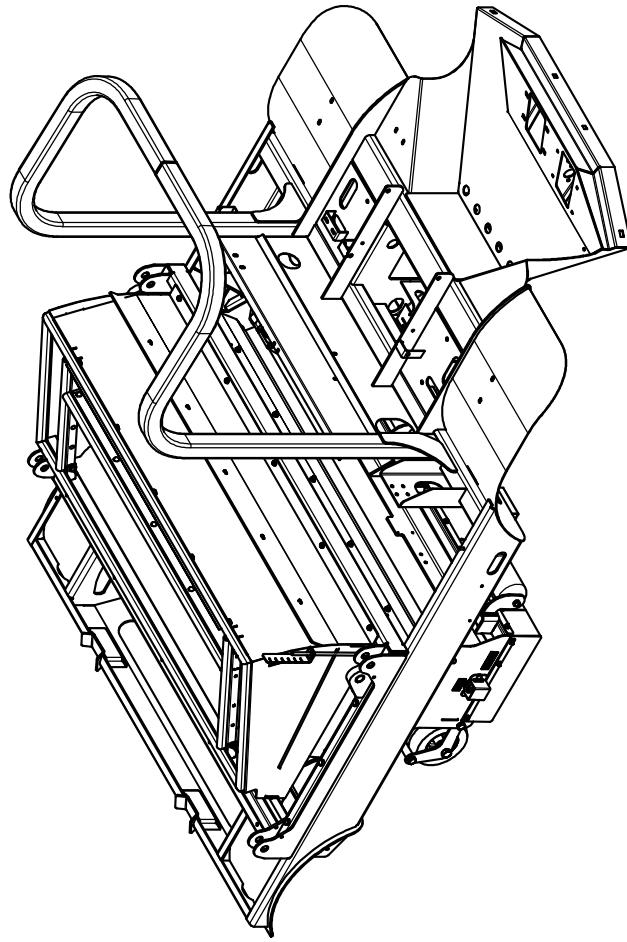
REV: B



DECK INSTALLATION

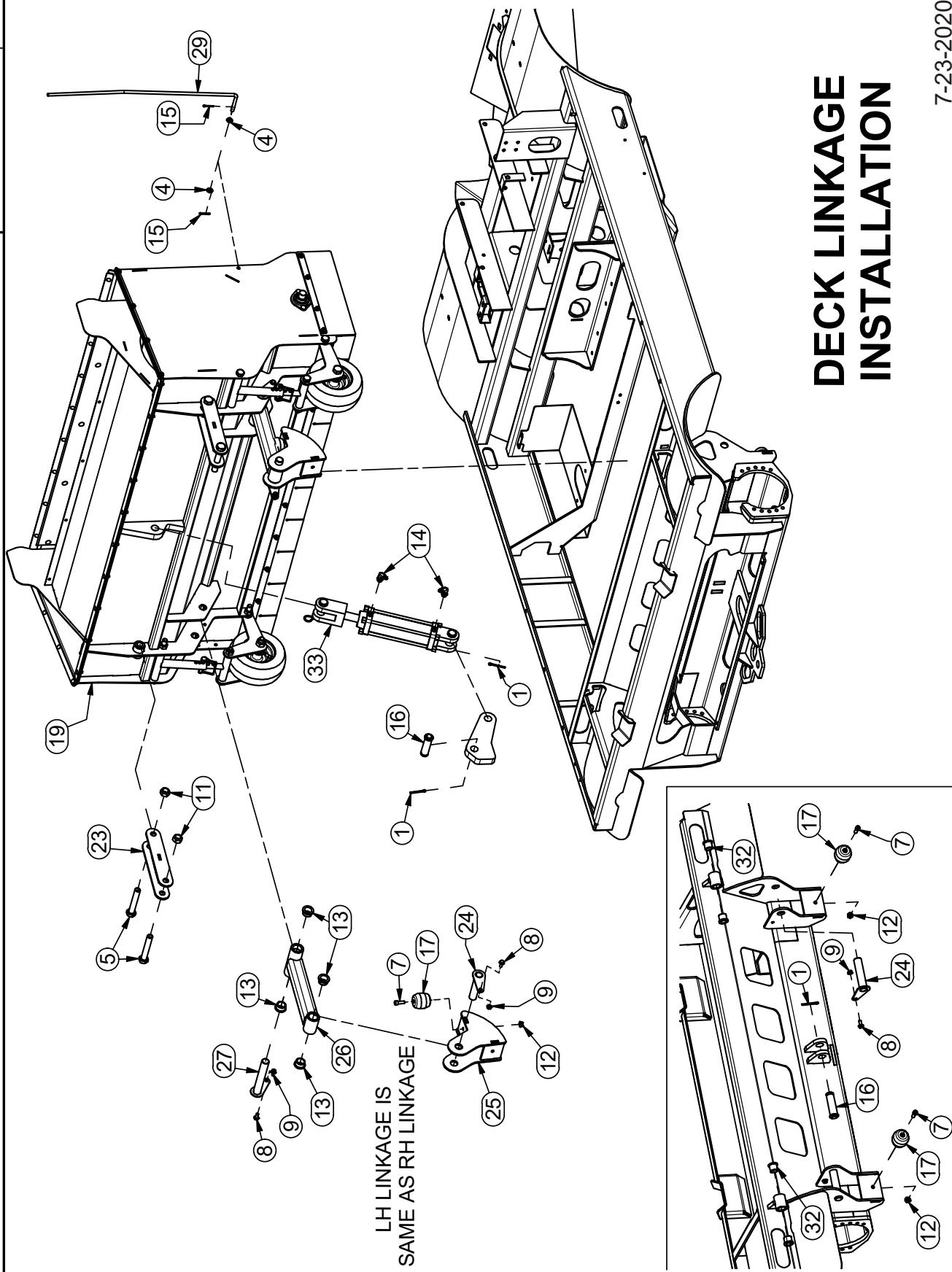
305085

REV: B

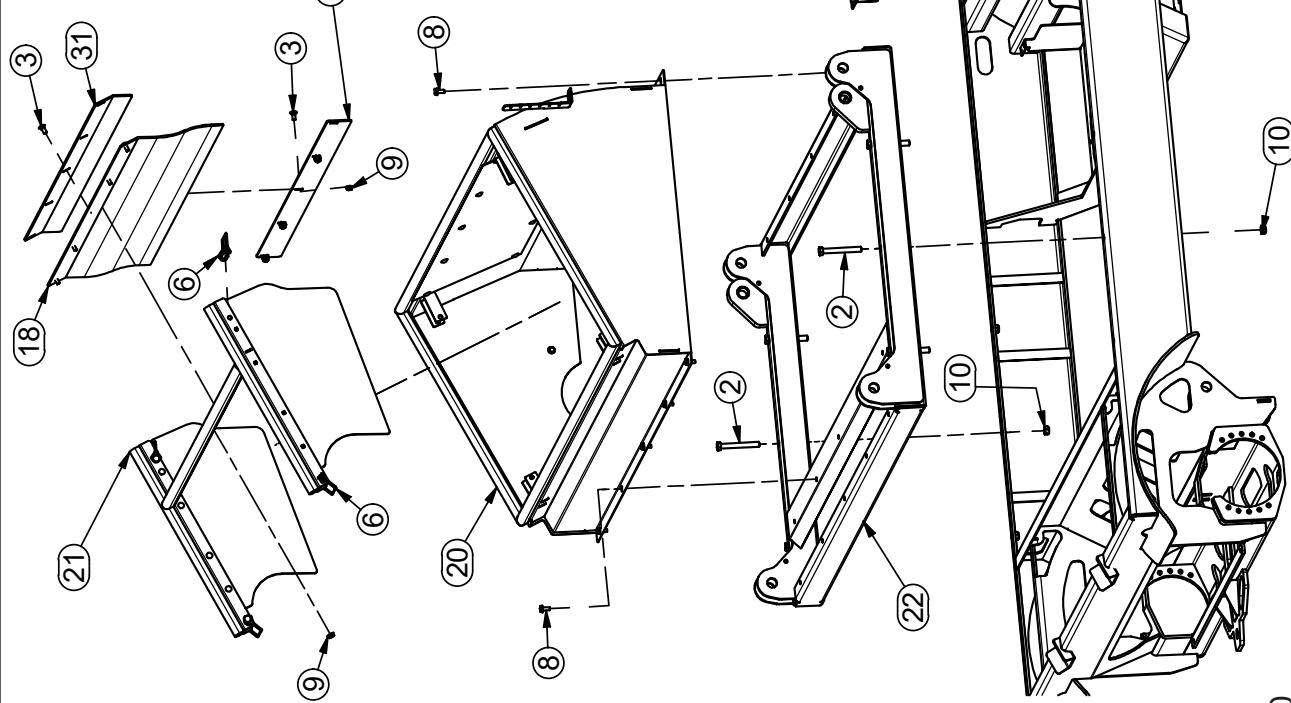


Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	2	100465	COTTER PIN, 3/16 X 1.75
2	6	110003	BOLT, 1/2-13 X 4.0
3	10	110020	Bolt, 5/16-18 X 0.75 in Carriage
4	2	110155	WASHER, 3/8" FLAT SAE
5	4	110170	BOLT, 3/4-10 X 4.5
6	4	110304	PIN, LOCK 3/8 X 2.5 SQ
7	4	110395	BOLT, 3/8-16 X 1.0 SHCS
8	14	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE
9	14	110606	NUT, 5/16-18 WIZ FLANGE
10	6	110615	NUT, 1/2-13, UNITORQUE LOCK
11	4	110625	NUT, 3/4-10, UNITORQUE LOCK
12	4	110645	NUT, 3/8-16 WIZ FLANGE
13	8	110851	BUSHING - IGUS, 1-1/4 x 1 x 3/4 frg
14	2	120220	ADAPTER, 4M-6MB90
15	2	200029	COTTER PIN, 5/32 X 1
16	1	220480	PIN
17	4	302130	Spring, 300lb Rubber
18	1	302148	Seal, Loop
19	1	305066	ASSY, DECK
20	1	305069	ASSY, DECK TRANSITION
21	1	305070	ASSY, DECK CHUTE
22	1	315315	WELDMENT, HOPPER MOUNT
23	2	315346	WELDMENT, UPPER DECK LINK
24	2	315373	WELDMENT, LOWER DECK PIN, 4.50
25	2	315374	WELDMENT, RUBBER SPRING
26	2	315375	WELDMENT, LOWER DECK LINK
27	2	315376	WELDMENT, LOWER DECK PIN, 6.25
28	1	317179	CUTOFF, AIR FLOW
29	1	317267	ROD, DECK HEIGHT INDICATOR
30	1	317282	LINK, DECK LIFT
31	1	317357	Guide, Loop Seal
32	4	800128	BUSHING, IGUS, FOOT PEDAL
33	1	923011	Cylinder, 2 X 6, -6 SAE Cross

305085 REV: B

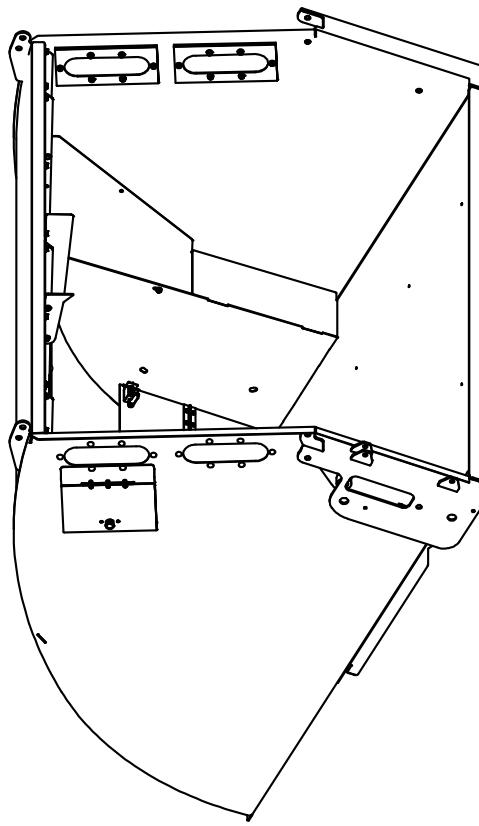


HOPPER TRANSITION & HOPPER MOUNT INSTALLATION



Parts List			
ITEM	QTY	PART #	DESCRIPTION
2	6	110003	BOLT, 1/2-13 X 4.0
3	10	110020	Bolt, 5/16-18 X 0.75 in Carriage
6	4	110304	PIN, LOCK 3/8 X 2.5 SQ
8	14	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE
9	14	110606	NUT, 5/16-18 WIZ FLANGE
10	6	110615	NUT, 1/2-13, UNITORQUE LOCK
18	1	302148	Seal, Loop
20	1	305069	ASSY, DECK TRANSITION
21	1	305070	ASSY, DECK CHUTE
22	1	315315	WELDMENT, HOPPER MOUNT
28	1	317179	CUTOFF, AIR FLOW
31	1	317357	Guide, Loop Seal

7-23-2020

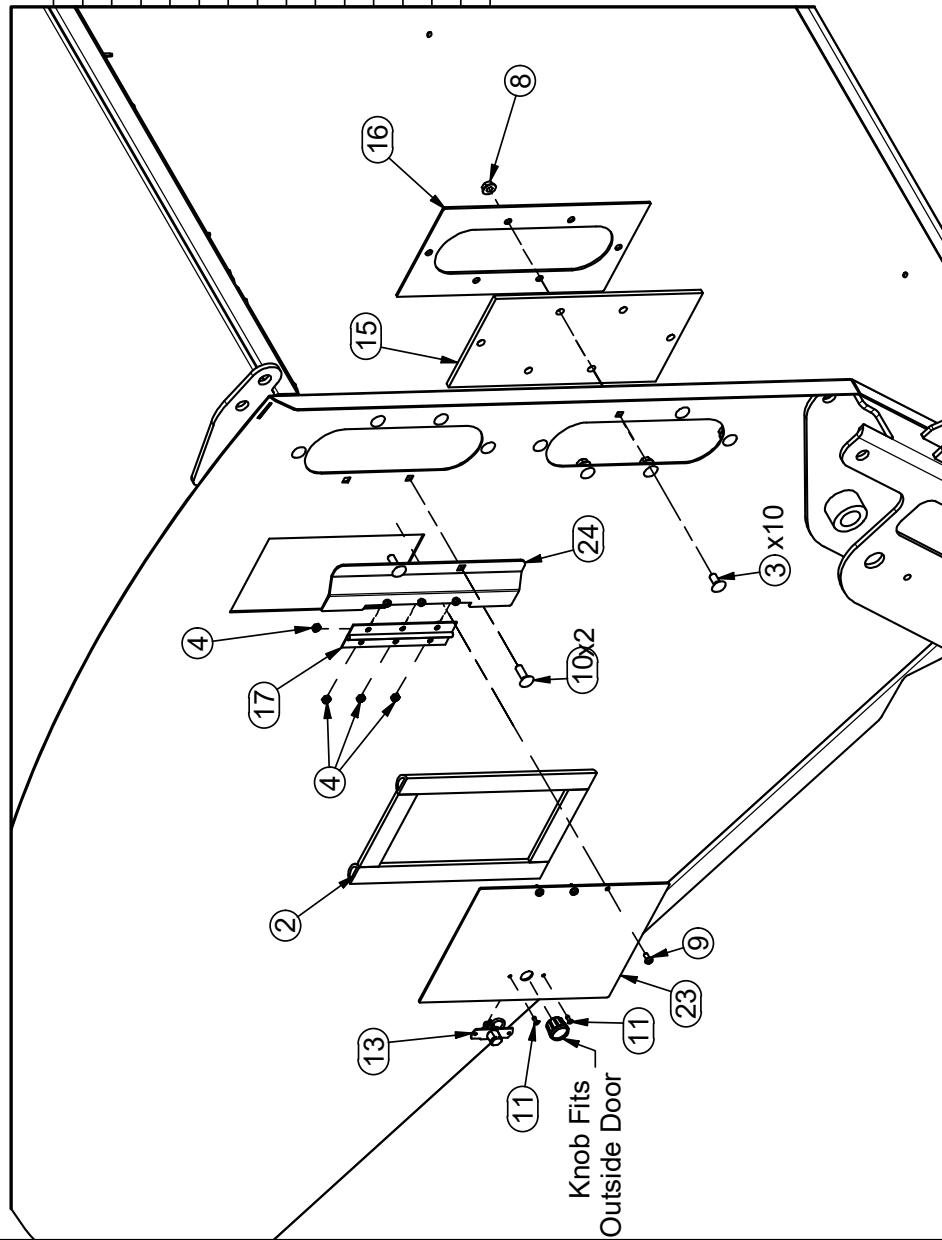


Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	3'2"	102004	D-Seal, Rubber 1.00" x 1.00"
2	2'8"	102075	SEAL
3	27	110020	Bolt, 5/16-18 X 0.75 in Carriage
4	6	110119	NUT, 10-24 LOCK
5	26	110319	NUT, 5/16-18 U-TYPE, 75L
6	8	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE
7	22	110459	BOLT, 5/16-18 X 1, WIZ FLANGE
8	43	110606	NUT, 5/16-18 WIZ FLANGE
9	6	110788	BOLT, 10-24 X .375 STAINLESS, PHILLIPS
10	12	110871	Bolt, 5/16-18 X 1 in Carriage
11	2	112051	POP RIVET, 1/8 X .275
12	1	302121	LINER, SWEEPER HOPPER
13	1	302131	LATCH, SPRING
14	1	305065	ASSY, SHIELD, HOPPER
15	4	311691	SIGHT GLASS, HOPPER
16	4	311692	Backing Plate, Sight Glass
17	1	311729	HINGE, 6" ALUMINUM W/ HOLES
18	1	315320	WELDMENT, HOPPER
19	2	317212	SCREEN, OUTER RETURN AIR
20	2	317213	SCREEN, INNER RETURN AIR
21	1	317214	SCREEN, RH RETURN AIR
22	1	317215	SCREEN, LH RETURN AIR
23	1	317217	DOOR, HOPPER DEBRIS
24	1	317218	BRKT, HOPPER DEBRIS DOOR
25	2	317245	RETAINER, LINER
26	1	317350	DEFLECTOR, RH HOPPER
27	1	317351	DEFLECTOR, LH HOPPER

HOPPER ASSEMBLY

WINDOW AND DOOR INSTALL

Parts List			
ITEM	QTY	PART #	DESCRIPTION
2	2"	102075	SEAL
3	27	110020	Bolt, 5/16-18 X 0.75 in Carriage
4	6	110119	NUT, 10-24 LOCK
13	1	302131	LATCH, SPRING
15	4	311691	SIGHT GLASS, HOPPER
16	4	311692	Backing Plate, Sight Glass
17	1	311729	HINGE, 6" ALUMINUM W/ HOLES
23	1	317217	DOOR, HOPPER DEBRIS
24	1	317218	BRKT, HOPPER DEBRIS DOOR
11	2	112051	POP RIVET, 1/8 X .275
26	1	317350	DEFLECTOR, RH HOPPER
27	1	317351	DEFLECTOR, LH HOPPER
1	3"2"	102004	D-Seal, Rubber 1.00" x 1.00"

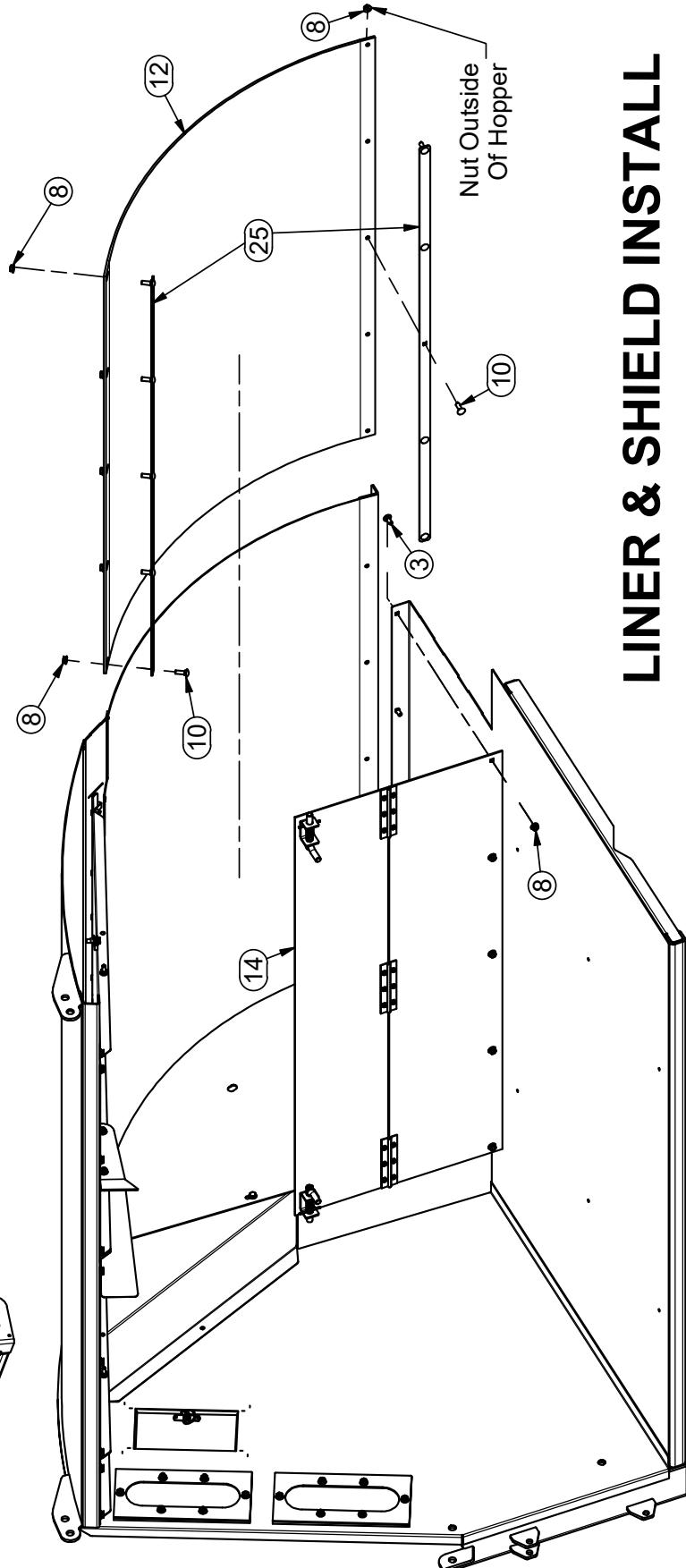
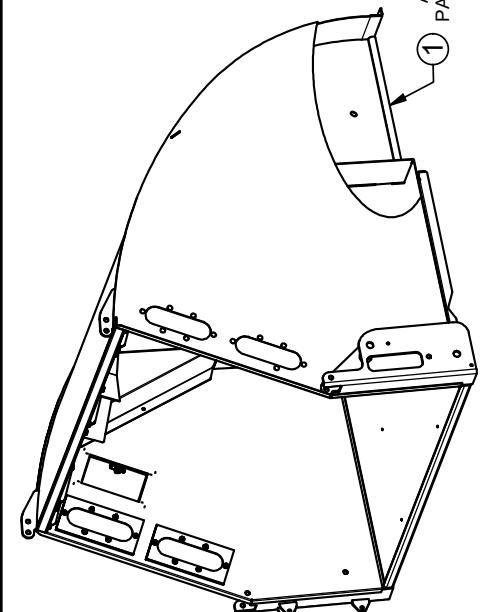


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REV. A

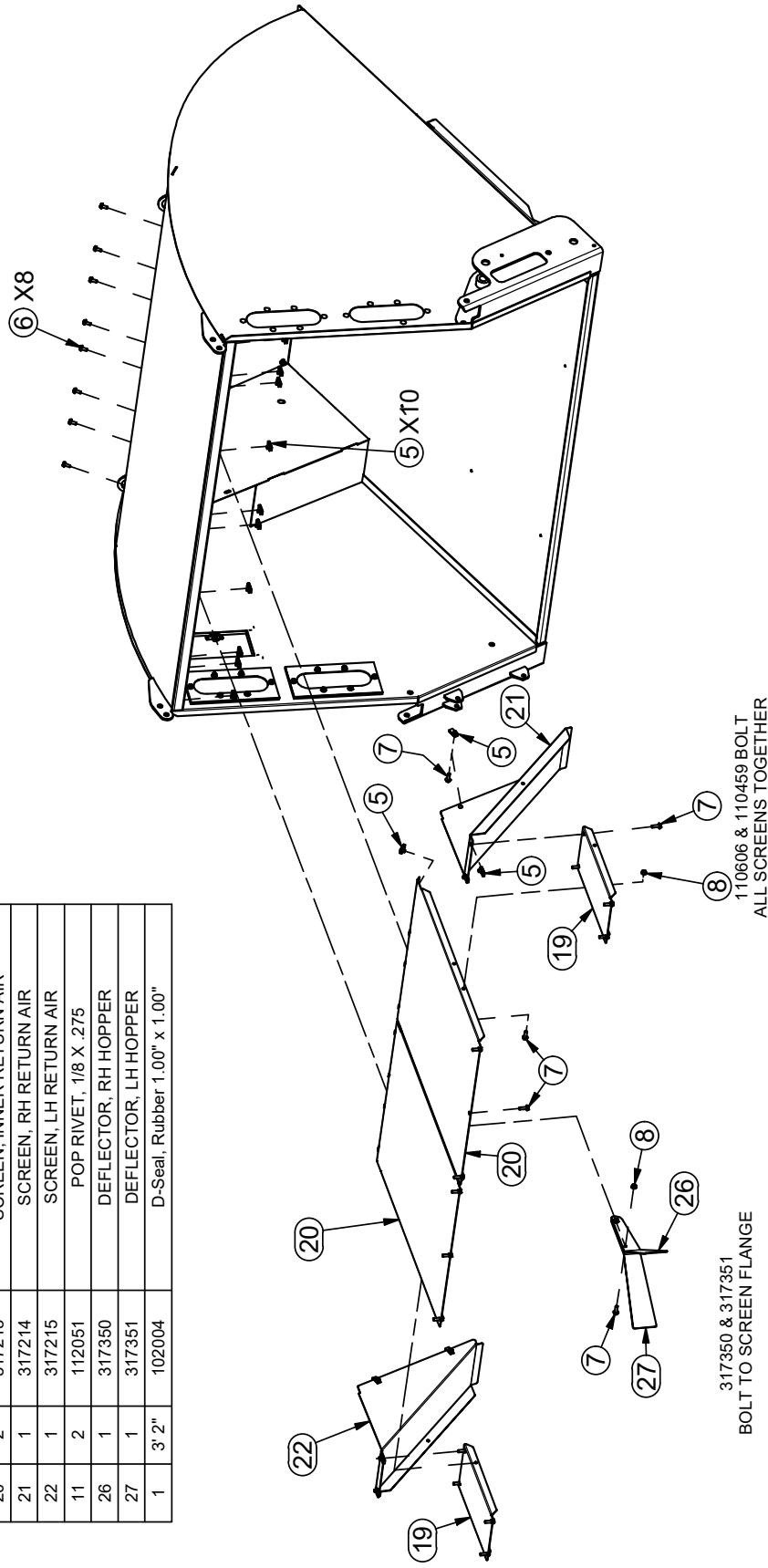
Parts List

ITEM	Q'TY	PART #	DESCRIPTION
1	3' 2"	102004	D-Seal, Rubber 1.00" x 1.00"
3	27	110020	Bolt, 5/16-18 X 0.75" in Carriage
8	43	110806	NUT, 5/16-18 WIZ FLANGE
10	12	110871	Bolt, 5/16-18 X 1 in Carriage
11	2	112051	POP RIVET, 1/8 X .275
12	1	302121	LINER, SWEEPER HOPPER
14	1	305055	ASSY, SHIELD, HOPPER
25	2	317245	RETAINER, LINER
26	1	317350	DEFLECTOR, RH HOPPER
27	1	317351	DEFLECTOR, LH HOPPER

**LINER & SHIELD INSTALL**

SCREEN ASSEMBLY AND INSTALL

Parts List		
ITEM	QTY	PART #
5	26	110319 NUT, 5/16-18 U-TYPE .75L
6	8	110444 BOLT, 5/16-18 X 0.75, WIZ FLANGE
7	22	110459 NUT, 5/16-18 WIZ FLANGE
8	43	110606 SCREEN, OUTER RETURN AIR
19	2	317212 SCREEN, INNER RETURN AIR
20	2	317213 SCREEN, RH RETURN AIR
21	1	317214 SCREEN, LH RETURN AIR
22	1	317215 POP RIVET, 1/8 X .275
11	2	112051 DEFLECTOR, RH HOPPER
26	1	317350 DEFLECTOR, LH HOPPER
27	1	317351 D-Seal, Rubber 1.00" x 1.00"
1	3' 2"	102004



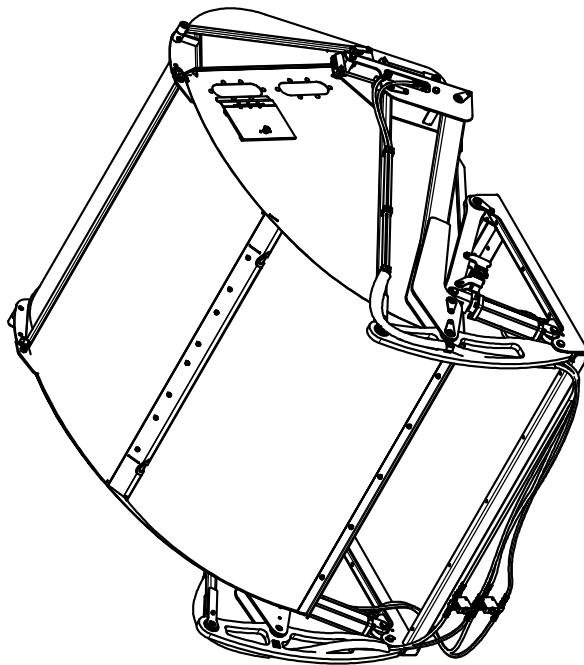
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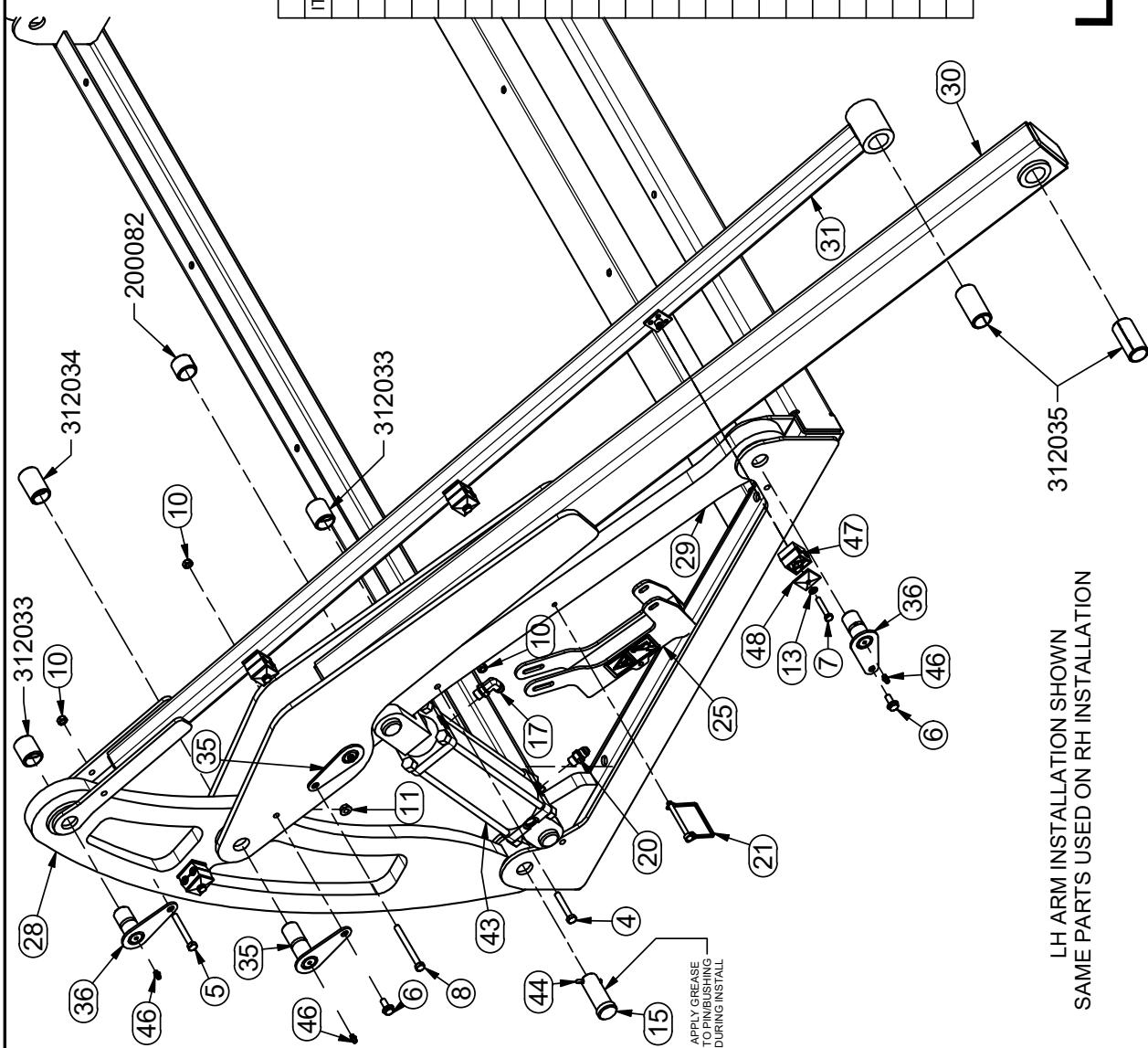
REV: C

10-20-2020

Parts List				Parts List			
ITEM	Q'TY	PART #	DESCRIPTION	ITEM	Q'TY	PART #	DESCRIPTION
1	8.75'	100354	WEBBING, NYLON 1.50ID, SHEATH	38	1	315393	WELDMENT, DOOR STOP
2	2	102137	CLEVIS PIN, 1/2 X 1.75	39	2	317216	CLEVIS PIN, 3/4 X 3.75, W/HOLE
3	4	110025	BOLT, 5/8-11 X 5.5	40	4	317320	SPACER, CYLINDER
4	4	110378	BOLT, 5/16-18 X 2.0	41	2	323010	CYLINDER - STEERING, 1-3/4 X 6
5	2	110396	BOLT, 5/16-18 X 2.5	42	1	323065	HOSE KIT, HAWK HOPPER HYDRAULIC
6	8	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE	43	2	323066	Cylinder, 2.5 X 8, -6 SAE, Hopper
7	8	110474	BOLT, 1/4-20 X 1-1/2	44	2	500184	COTTER PIN, 3/16 X 1.25
8	2	110536	BOLT, 5/16-18 X 3.25	45	2	500230	GREASE ZERK, 1/4-28 90deg
9	2	110576	BOLT, 5/8-11 X 1.5 GR 5	46	14	510174	GREASE ZERK, 1/4-28 ST
10	8	110600	NUT, 5/16-18, UNITORQUE LOCK	47	8	522104	DOUBLE HOSE CLAMP
11	8	110606	NUT, 5/16-18 WIZ FLANGE	48	8	522105	DOUBLE COVERPLATE
12	6	110639	NUT, 5/8-11, UNITORQUE LOCK				
13	8	110667	WASHER, 1/4" LOCK				
14	2	112131	Clevis Pin, 1/2" x 1-1/2", ZINC-PLATED STEEL				
15	2	112133	Clevis Pin, 1" x 2-3/16", ZINC-PLATED STEEL				
16	2	112135	Clevis Pin, 3/8" x 2", Zinc-Plated Steel				
17	2	120222	ADAPTER, 6MJ-6MB90				
18	4	120233	ADAPTER, 4MJ-4MB				
19	4	120266	ADAPTER, 4MJ-4FJX90				
20	2	120398	ADAPTER, REST 6MJ-6MB, .047				
21	2	140016	PIN, LOCK, 1/4 X 2-1/4, SQ WIRE				
22	6	200029	COTTER PIN, 5/32 X 1				
23	1	305063	Assy, Hopper Door, ISO				
24	1	305074	ASSY, HOPPER				
25	2	305103	Assy, Safety Latch, ISO				
26	1	312022	CLIP, HAIRPIN 3/32 x 1.625				
27	2	315257	PIN WELDMENT, HOPPER DOOR				
28	2	315316	WELDMENT, VERTICAL LIFT LINK				
29	2	315317	WELDMENT, CYLINDER LIFT LINK				
30	2	315318	WELDMENT, LOWER LIFT LINK				
31	2	315319	WELDMENT, UPPER LIFT LINK				
32	2	315322	WELDMENT, DOOR LIFT LINK				
33	2	315327	WELDMENT, DOOR LIFT PIVOT LINK				
34	4	315331	WELDMENT, HOPPER LIFT - 4.00"				
35	4	315332	WELDMENT, LIFT LINK PIN - 2.87"				
36	4	315333	WELDMENT, LIFT LINK PIN - 2.12"				
37	2	315383	Weldment, Door Arm End				

HOPPER INSTALLATION

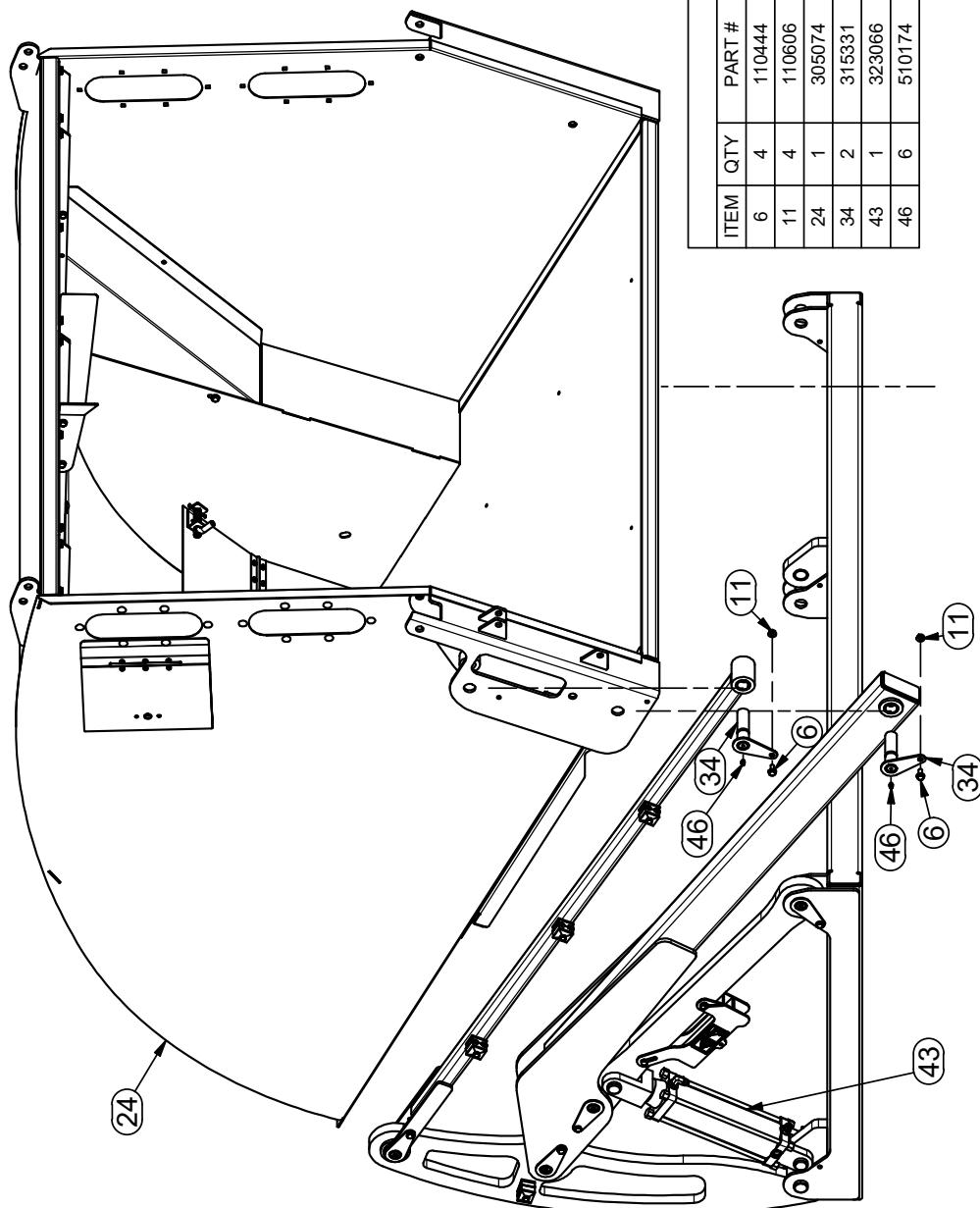




LIFT ARM ASSEMBLY

LH ARM INSTALLATION SHOWN
SAME PARTS USED ON RH INSTALLATION

10-26-2020

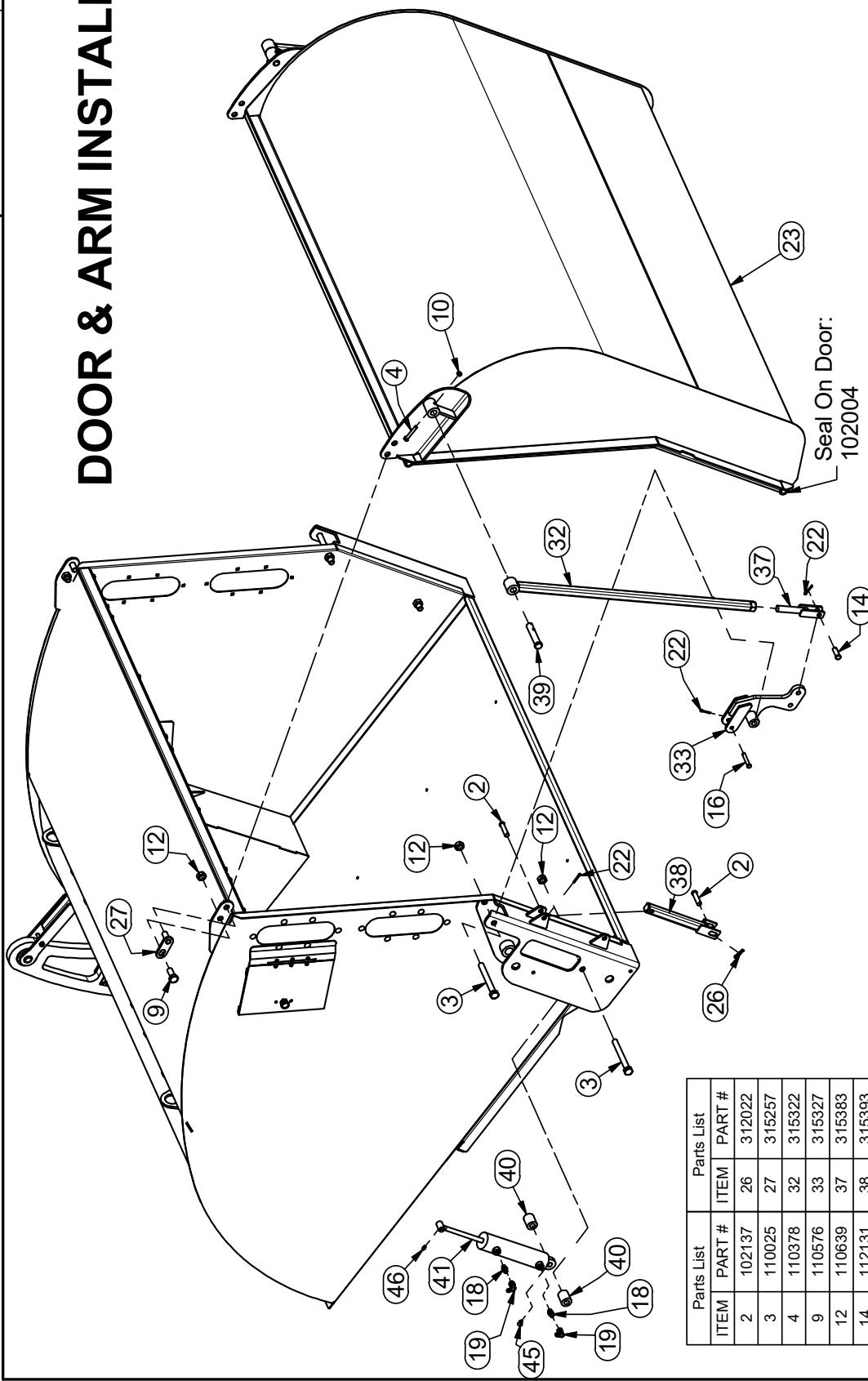


Parts List			
ITEM	QTY	PART #	DESCRIPTION
6	4	110444	BOLT, 5/16-18 X 0.75, W/FLANGE
11	4	110606	NUT, 5/16-18 W/FLANGE
24	1	305074	ASSY, HOPPER
34	2	315331	WELDMNT, HOPPER LIFT - 4.00"
43	1	323066	Cylinder, 2.5 X 8, -6 SAE, Hopper
46	6	510174	GREASE ZERK, 1/4-28 ST

LH INSTALLATION SHOWN
SAME PARTS USED ON RH INSTALLATION

HOPPER INSTALL

DOOR & ARM INSTALL

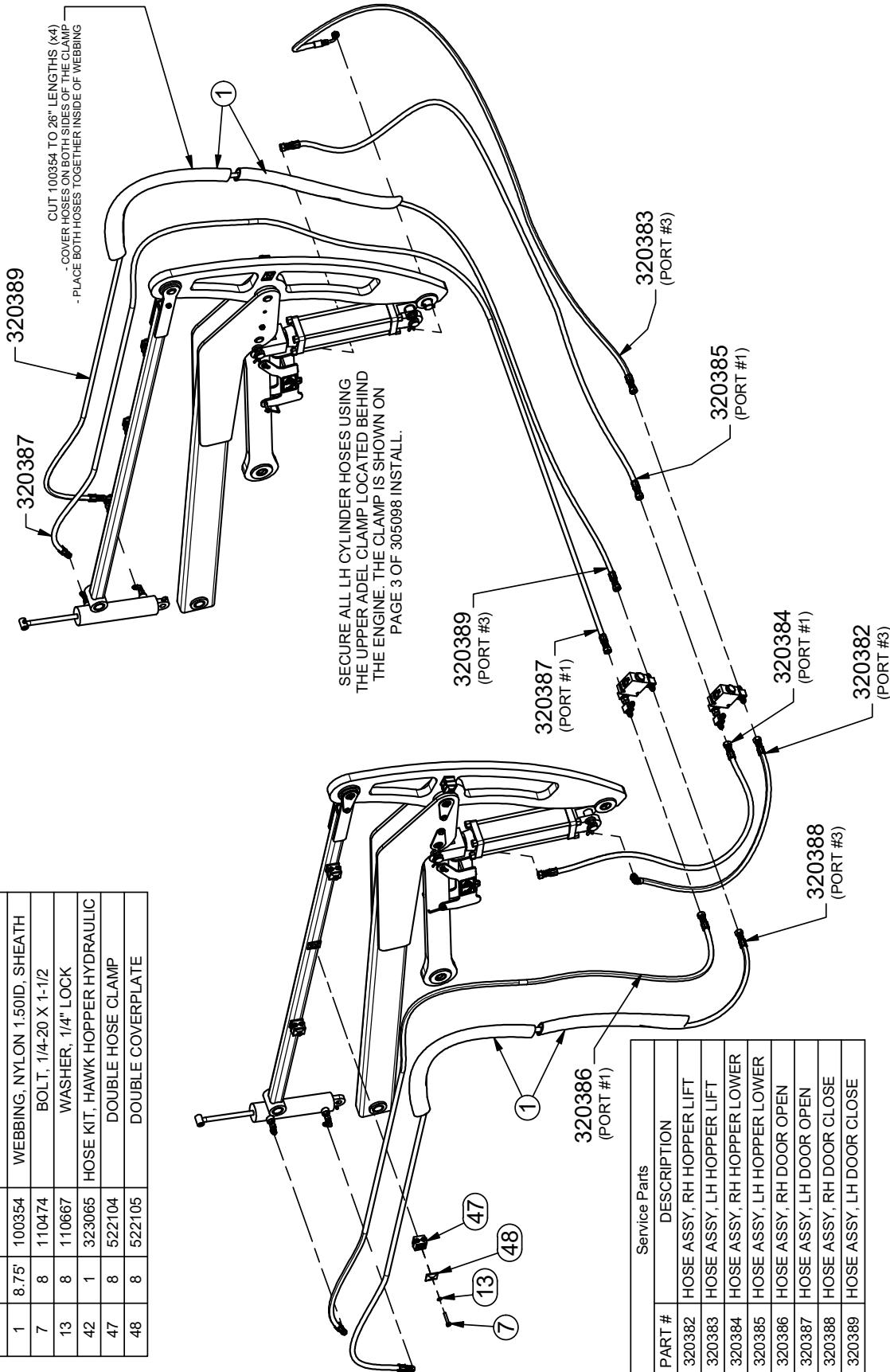


1. INITIALLY SET THE HOPPER DOOR LIFT LINK TO 36.5" (CTR TO CTR)
2. ADJUST AS NEEDED TO COMPRESS THE DOOR SEAL TO 0.5" AT THE BOTTOM OF THE DOOR

Parts List		Parts List	
ITEM	PART #	ITEM	PART #
2	102137	26	312022
3	110025	27	315257
4	110378	32	315322
9	110576	33	315327
12	110639	37	315383
14	112131	38	315393
16	112135	39	317216
18	122033	40	317320
19	122066	41	323010
22	200029	45	500230
23	305063	46	510174

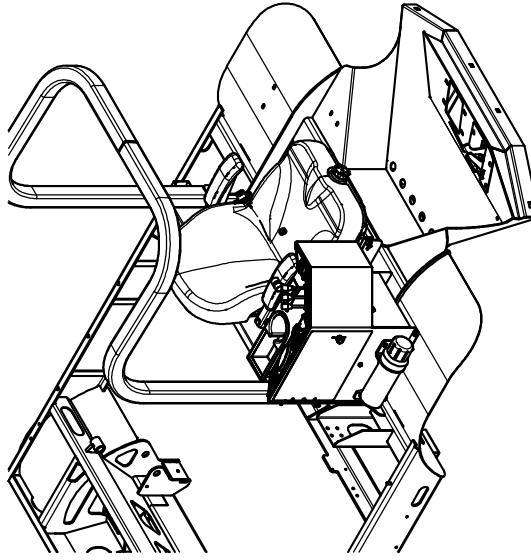
HOPPER CYLINDER PLUMBING

Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	8.75'	100354	WEBBING, NYLON 1.50ID. SHEATH
7	8	110474	BOLT, 1/4-20 X 1-1/2
13	8	110687	WASHER, 1/4" LOCK
42	1	323065	HOSE KIT, HAWK HOPPER HYDRAULIC
47	8	522104	DOUBLE HOSE CLAMP
48	8	522105	DOUBLE COVERPLATE



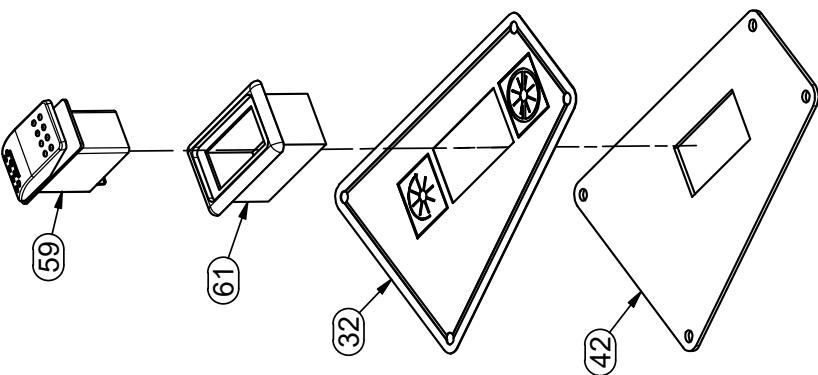
Parts List								Parts List							
ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION				
1	4'	100613	SEAL, RUBBER .50 X 187	37	1	305064	Assy, Console Panel, ISO	52	1	332083	HARNESS, INSTRUMENT PANEL				
2	2.5'	102072	TAPE, DOUBLE-SIDED AUTO, 1/2"X.045	38	1	311729	HINGE, 6" ALUMINUM W/ HOLES	53	1	332084	HARNESS, RELAY				
3	4	110020	Bolt, 5/16-18 X 0.75 in Carriage	39	1	315349	WELDMENT, FOOT PEDAL MOUNT	54	2	510112	COTTER PIN, 3/16 X 1				
4	12	110103	WASHER, #10 LOCK	40	1	315355	WELDMENT, FOOT PEDAL PIVOT	55	2	540075	BEARING, ROD END 1/4-28 W/STUD				
5	6	110119	NUT, 10-24 LOCK	41	1	317102	PANEL, LEVER	56	4	800128	BUSHING, IGUS, FOOT PEDAL				
6	17	110264	BOLT, 10-24 X .5 STAINLESS, PHILLIPS	42	1	317103	PANEL, DECK SWITCH	57	1	810886	LINKAGE, 1/4-28 FOOT PEDAL				
7	2	110404	BOLT, 3/8-16 X 1.75	43	1	317172	BASE, SEAT MOUNT	58	1	815094	WELDMENT, REV FOOT PEDAL PIVOT				
8	3	110437	BOLT, 3/8-16 X 0.75, WIZ FLANGE	44	1	317173	PIN, SEAT MOUNTING	59	2	832005	SWITCH, PADDLE, CARLING (29253)				
9	4	110468	BOLT, 1/4-20 X 0.75, WIZ FLANGE	45	1	317186	COVER, FOOT PEDAL	60	1	832018	SWITCH, SPDT, ON-ON				
10	10	110606	NUT, 5/16-18 WIZ FLANGE	46	1	317193	DOOR, CONSOLE ACCESS	61	6	832024	MOUNT, SWITCH (VMS)				
11	2	110621	NUT, 3/8-16, UNITORQUE LOCK	47	1	317195	PANEL, GAUGE & SWITCH	62	3	832033	HOLE PLUG (VHP)				
12	4	110630	NUT, 1/4-20 LOCK (NYLON INSERT)	48	2	317249	PIN, QUICK RELEASE	63	1	832088	MODULE, TIME DELAY, 1.75 SEC, 1804				
13	10	110631	NUT, 10-24 LOCK NYLON INSERT	49	1	332031	SWITCH, IGNITION	64	2	832082	ALARM, PANEL MOUNT, CONTINUOUS TONE				
14	2	110632	NUT, 1/4-28, UNITORQUE LOCK	50	1	332059	DISPLAY, MACHINE								
15	3	110645	NUT, 3/8-16 WIZ FLANGE	51	1	332060	HARNESS, MASTER								
16	6	110788	BOLT, 10-24 X .375 STAINLESS, PHILLIPS												
17	10	110834	SCREW, 10-24 X 3/4 SS PAN HEAD												
18	17	110835	NUT, 10-24 RIVET ALUMINUM												
19	2	110971	BOLT, 5/16-18 X .50 SHCS												
20	2	112051	POP RIVET, 1/8 X .275												
21	2	112119	ROLL PIN, 5/32 X 2 ZP												
22	2	112126	SPRING, COMP 3.0L X 0.6 OD X 045												
23	1	152004	HOLDER, MANUAL												
24	1	200020	CLAMP, ADEL AC22 265 HOLE												
25	1	302015	HOLDER - CUP, MOLDED												
26	3	302017	CLEVIS - THROTTLE												
27	1	302078	SEAT, 13M SUSPENSION												
28	1	302124	CABLE, THROTTLE 60"												
29	1	302131	LATCH, SPRING												
30	1	302132	DECAL, MAIN CONSOLE												
31	1	302133	Decal, Hydraulics Panel												
32	1	302134	DECAL, BROOM PANEL												
33	1	302135	Decal, Throttle Panel												
34	1	302141	CABLE, PUSH/PULL 60"												
35	1	305061	Assy, Forward Foot Pedal												
36	1	305062	Assy, Reverse Foot Pedal												

OPERATOR STATION & ELECTRICAL ASSEMBLY

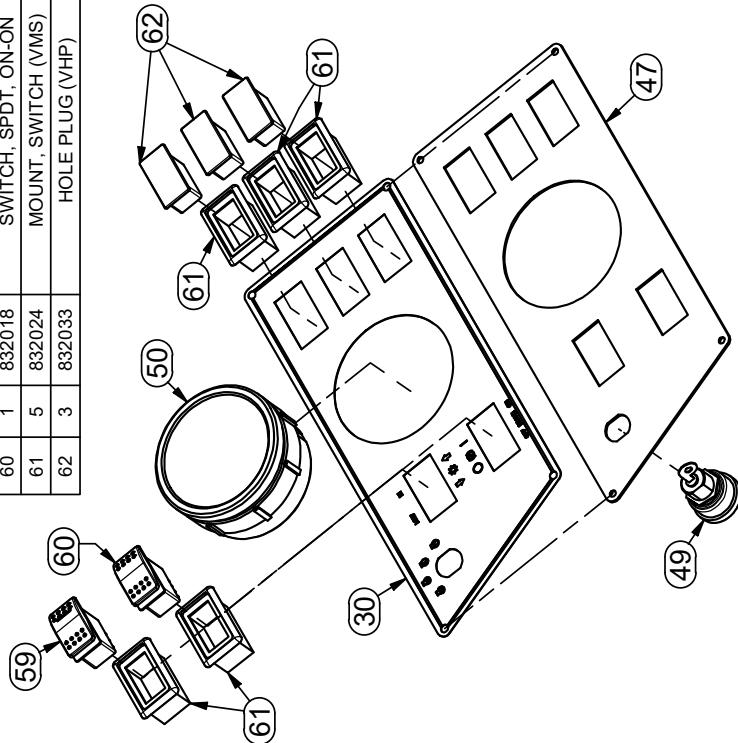


DECK SWITCH PANEL ASSEMBLY

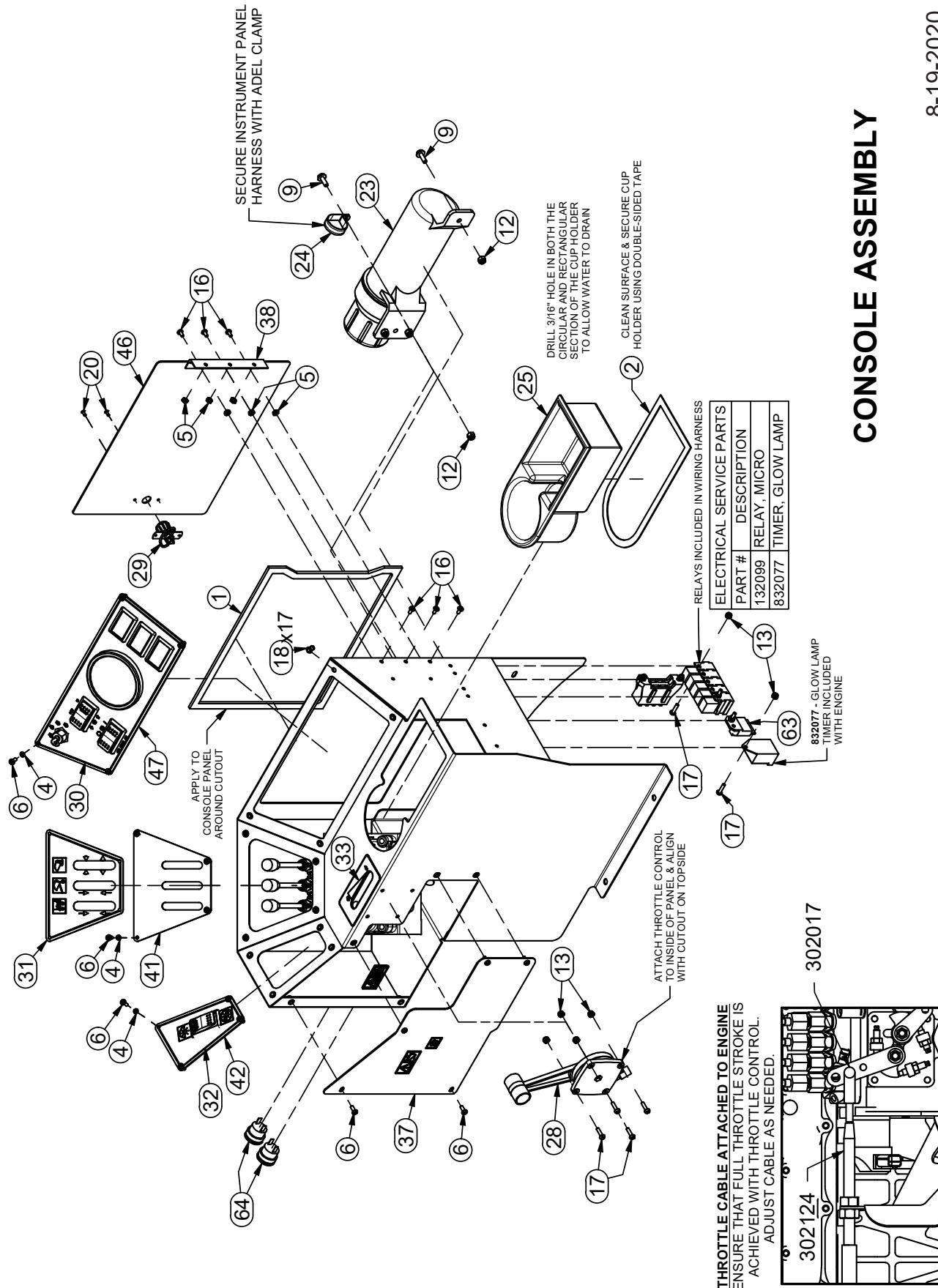
Parts List		
ITEM	QTY	PART #
DESCRIPTION		
32	1	302134
		DECAL, BROOM PANEL
42	1	317103
		PANEL, DECK SWITCH
59	1	832005
		SWITCH, PADDLE, CARLING (29253)
61	1	832024
		MOUNT, SWITCH (VMS)

**INSTRUMENT PANEL ASSEMBLY**

Parts List		
ITEM	QTY	PART #
DESCRIPTION		
30	1	302132
		DECAL, MAIN CONSOLE
47	1	317195
		PANEL, GAUGE & SWITCH
49	1	332031
		SWITCH, IGNITION
50	1	332059
		DISPLAY, MACHINE
59	1	832005
		SWITCH, PADDLE, CARLING (29253)
60	1	832018
		SWITCH, SPDT, ON-ON
61	5	832024
		MOUNT, SWITCH (VMS)
62	3	832033
		HOLE PLUG (VHP)



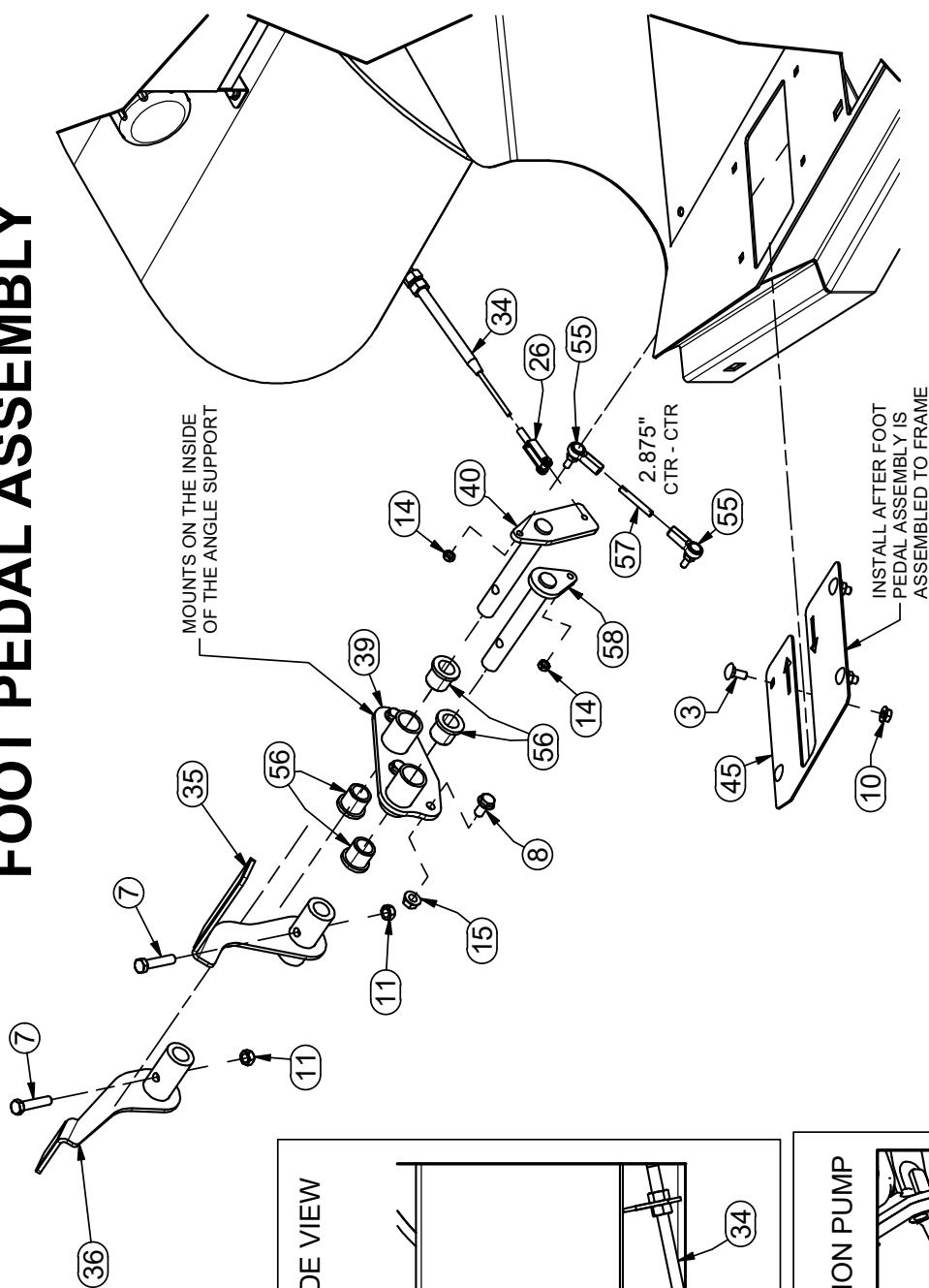
CONSOLE ASSEMBLY



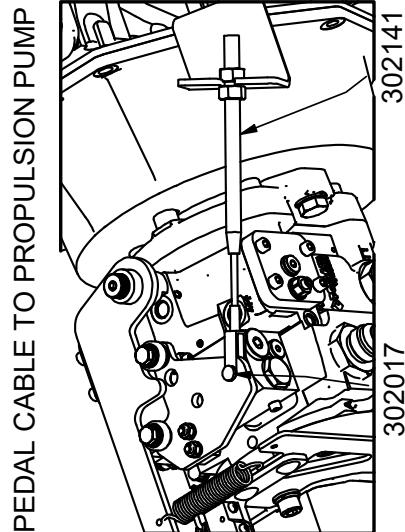
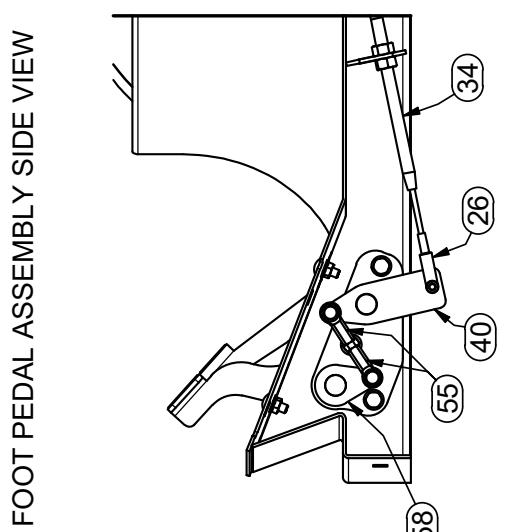
305090

REV. B

FOOT PEDAL ASSEMBLY

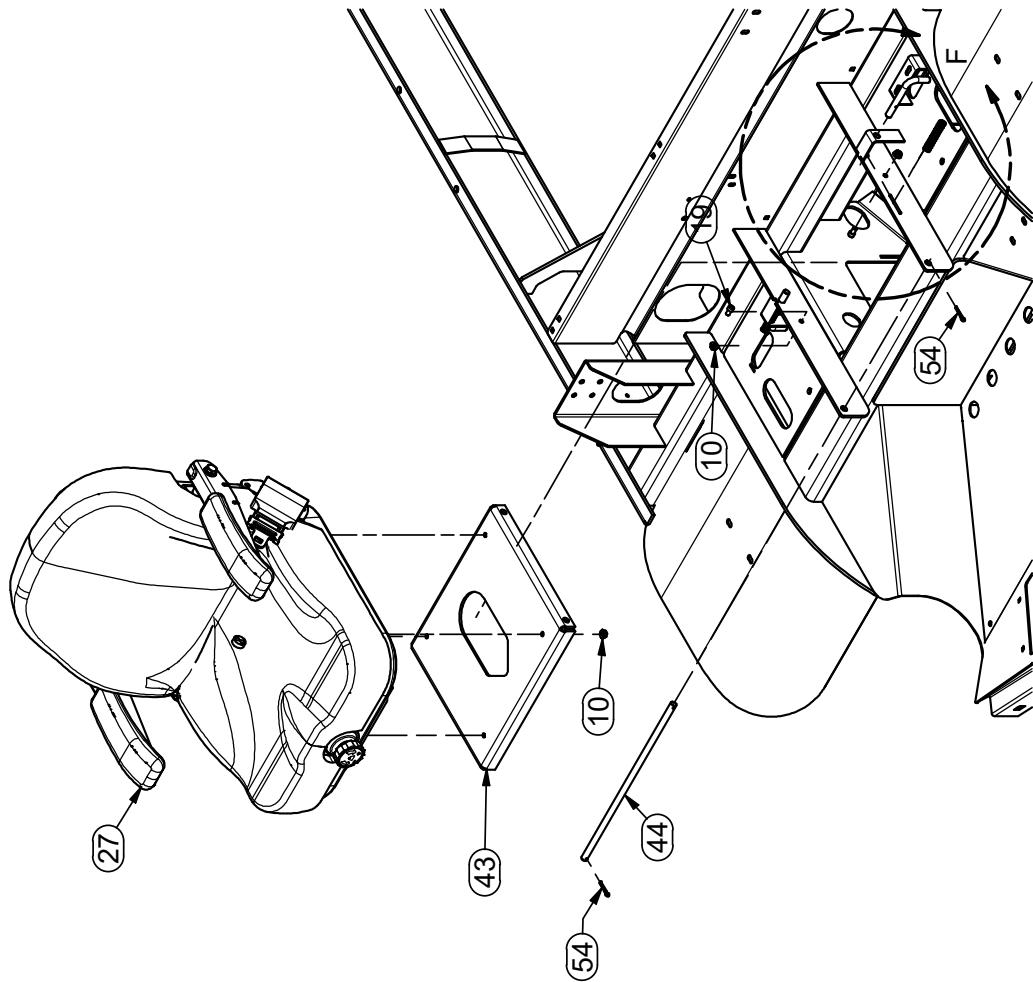


FOOT PEDAL ASSEMBLY SIDE VIEW



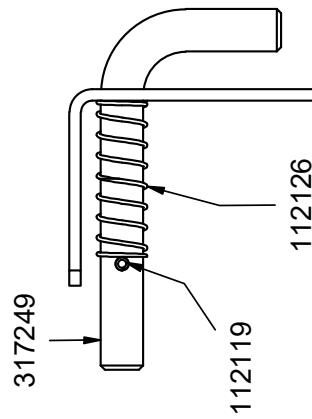
PEDAL CABLE TO PROPULSION PUMP

SEAT ASSEMBLY

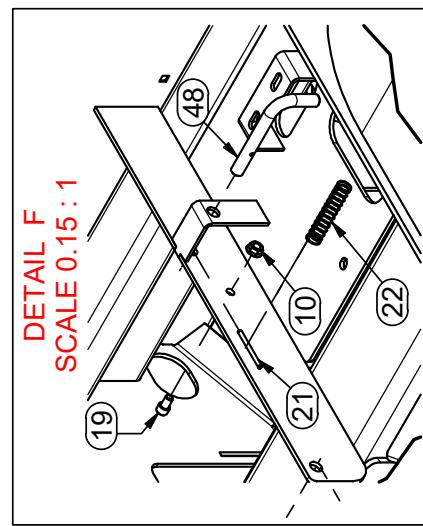


Parts List			
ITEM	QTY	PART #	DESCRIPTION
10	6	110606	NUT, .5/16-18 WIZ FLANGE
19	2	110971	BOLT, 5/16-18 X .50 SHCS
21	2	112119	ROLL PIN, 5/32 X 2 ZP
22	2	112126	SPRING, COMP 3.0L x 0.6 OD x .045
27	1	302078	SEAT, 13M SUSPENSION
43	1	317172	BASE, SEAT MOUNT
44	1	317173	PIN, SEAT MOUNTING
48	2	317249	PIN, QUICK RELEASE
54	2	510112	COTTER PIN, 3/16 X 1

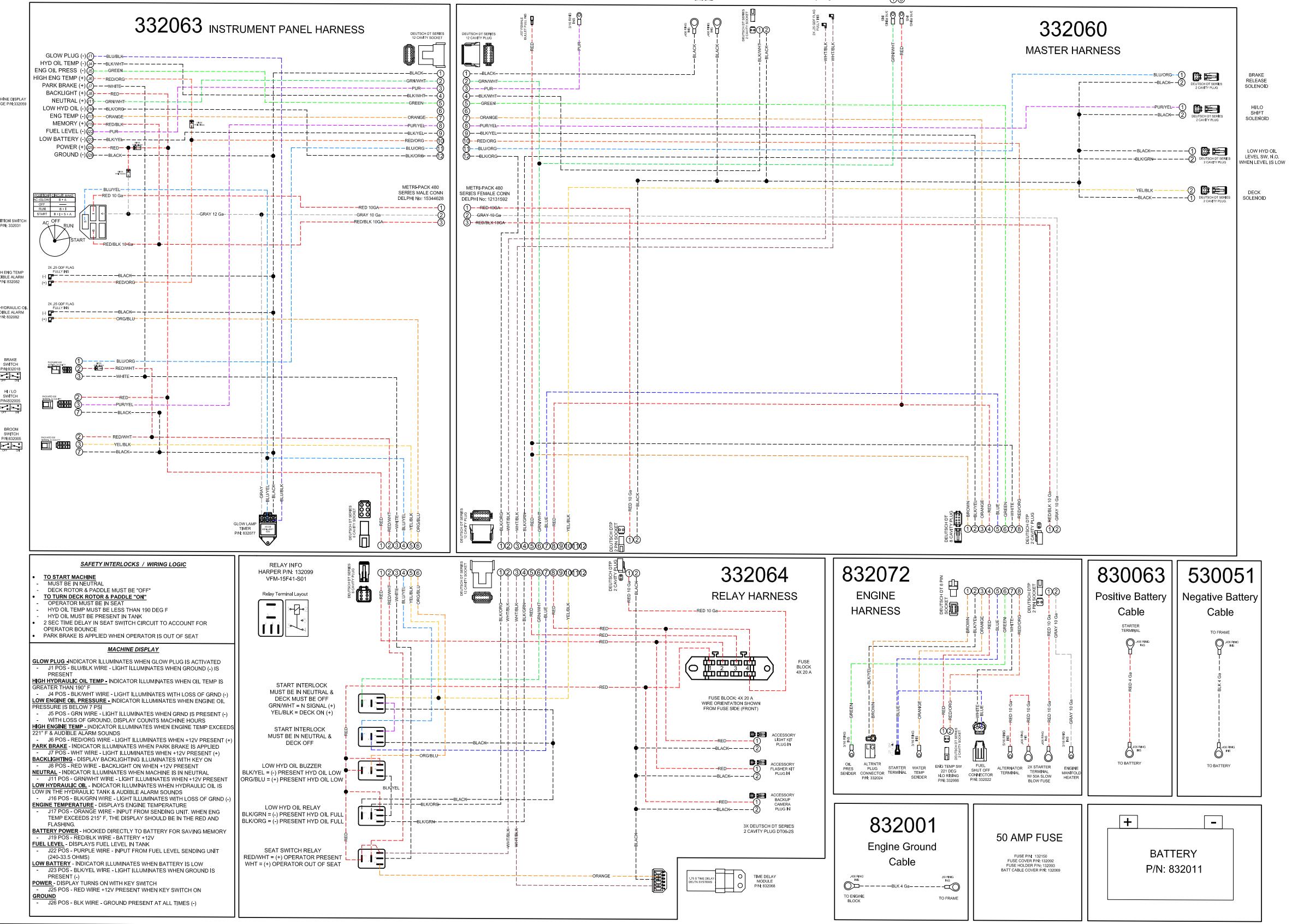
SEAT PIN SIDE VIEW



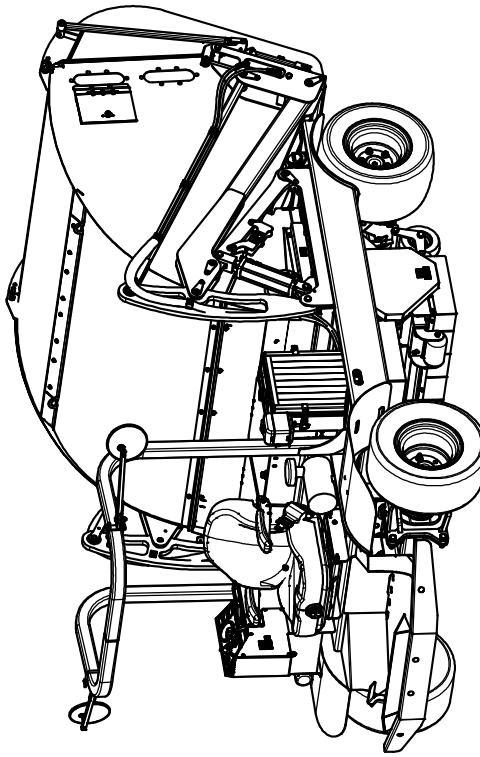
**DETAIL F
SCALE 0.15 : 1**



SWEEPER WIRING SCHEMATIC DIAGRAM OVERVIEW

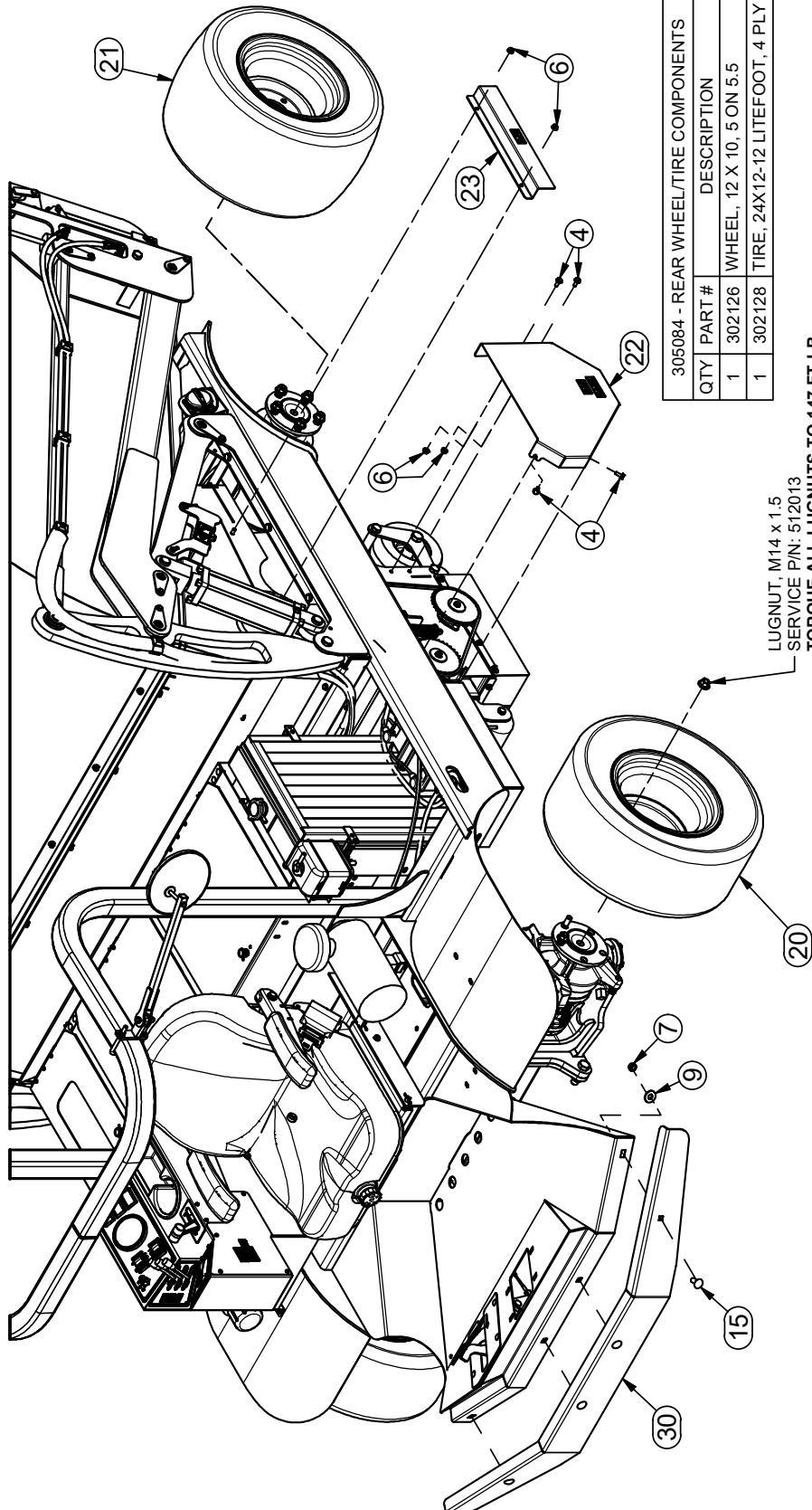


MIRROR, TIRE, & SHIELD INSTALLATION



Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	15 FT	100613	SEAL, RUBBER .50 X .187
2	18	110119	NUT, 10-24 LOCK
3	2	110400	BOLT, 3/8-16 X 2.0
4	4	110444	BOLT, 5/16-18 X 0.75, WIZ FLANGE
5	2	110474	BOLT, 1/4-20 X 1-1/2
6	4	110606	NUT, 5/16-18 WIZ FLANGE
7	4	110615	NUT, 1/2-13, UNITORQUE LOCK
8	4	110645	NUT, 3/8-16 WIZ FLANGE
9	4	110658	WASHER, 1/2" FLAT STANDARD
10	2	110667	WASHER, 1/4" LOCK
11	18	110788	BOLT, 10-24 X .375 STAINLESS, PHILLIPS
12	4	110826	NUT, 3/8-16 GR 5
13	2	111185	BOLT, SQUARE U, 3/8-16 X 2.50 X 4.0
14	6	112051	POP RIVET, 1/8 X .275
15	4	112070	Bolt, 1/2-13 X 1.25 in Carriage
16	4	2111747	FRiction WASHER 1.5"
17	3	302131	LATCH, SPRING
18	2	302139	Convex Mirror, 8" Round, Offset Ball-Stud
19	4	302140	Plug, Snap-in Square, 3/4"
20	2	305083	ASSY, FRONT TIRE
21	2	305084	ASSY, REAR TIRE
22	1	305099	ASSY, LOWER DECK SHIELD
23	1	305100	ASSY, UPPER DECK SHIELD
24	1	305101	ASSY, RH ENGINE SHIELD
25	3	3111729	HINGE, .6" ALUMINUM W/ HOLES
26	1	312022	CLIP, HAIRPIN 3/32 X 1.625
27	2	315385	WELDMENT, SWINGING MIRROR
28	2	315391	WELDMENT, MIRROR UBOLT MOUNT
29	2	317237	SHIELD, UPPER ENGINE
30	1	317244	BUMPER, FRONT

BUMPER, DECK SHIELDS, & WHEEL/TIRE ASSEMBLY

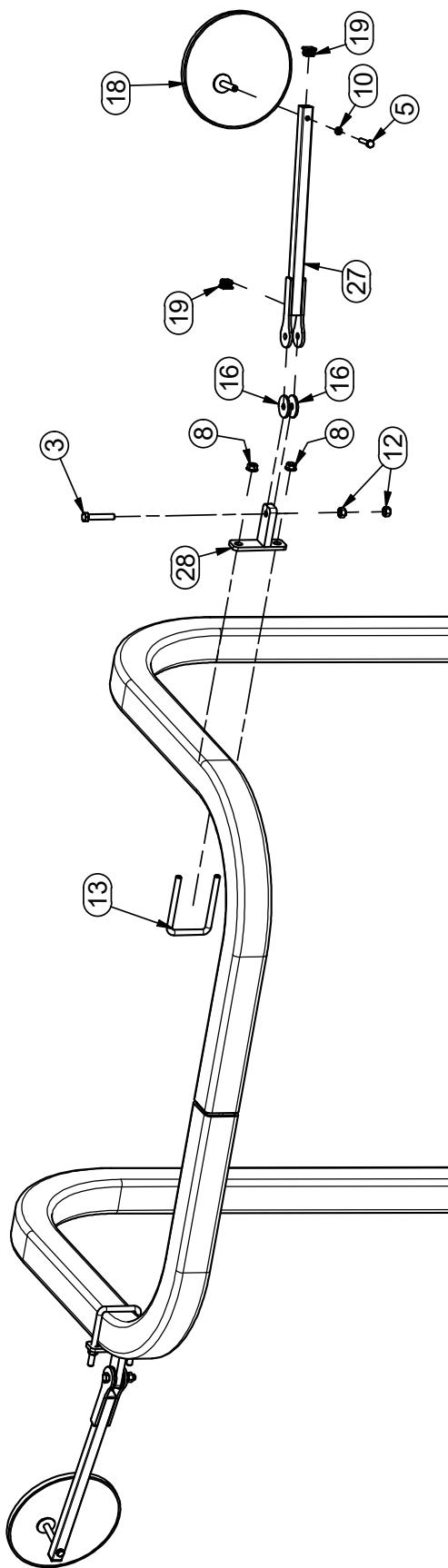


7-23-2020

MIRROR ASSEMBLY

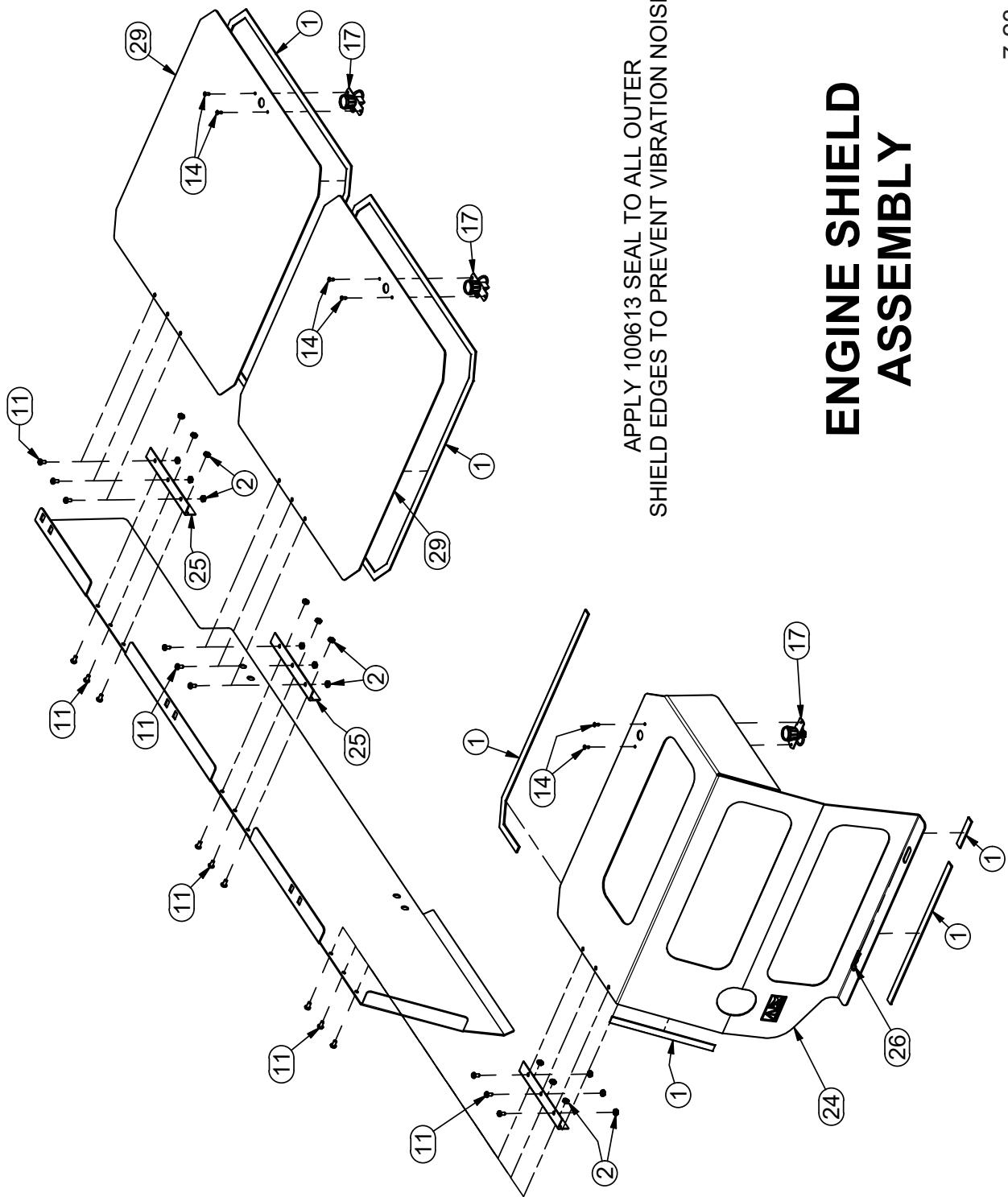
Parts List			
ITEM	QTY	PART #	DESCRIPTION
3	2	110400	BOLT, 3/8-16 X 2.00
5	2	110474	BOLT, 1/4-20 X 1-1/2
8	4	110645	NUT, 3/8-16 WIZ FLANGE
10	2	110667	WASHER, 1/4" LOCK
12	4	110826	NUT, 3/8-16 GR 5
13	2	111185	BOLT, SQUARE U, 3/8-16 x 2.50 x 4.0
16	4	211747	FRiction WASHER 1.5"
18	2	302139	Convex Mirror, 8" Round, Offset Ball-Stud
19	4	302140	Plug, Snap-In Square, 3/4"
27	2	315385	WELDMENT, SWINGING MIRROR
28	2	315391	WELDMENT, MIRROR UBLT MOUNT

SAME PARTS USED ON OPPOSITE SIDE



305095

REV: A

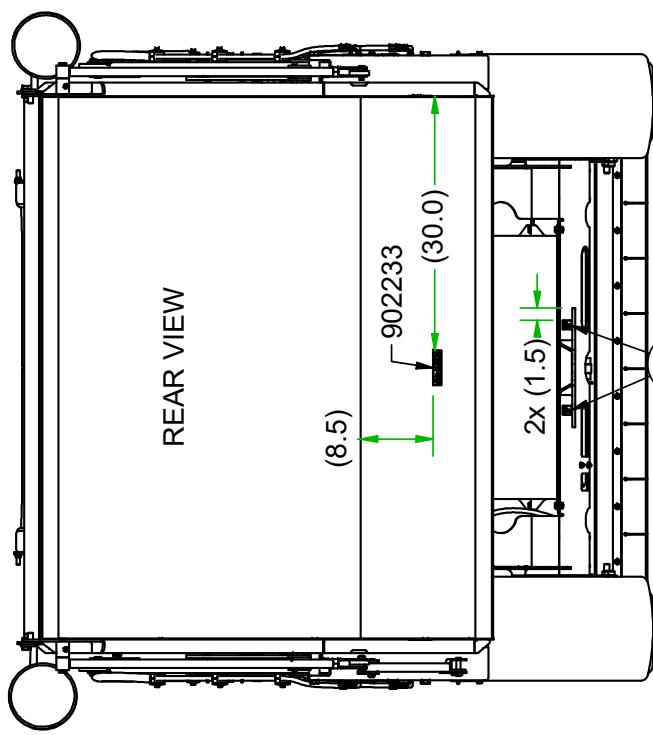


ENGINE SHIELD ASSEMBLY

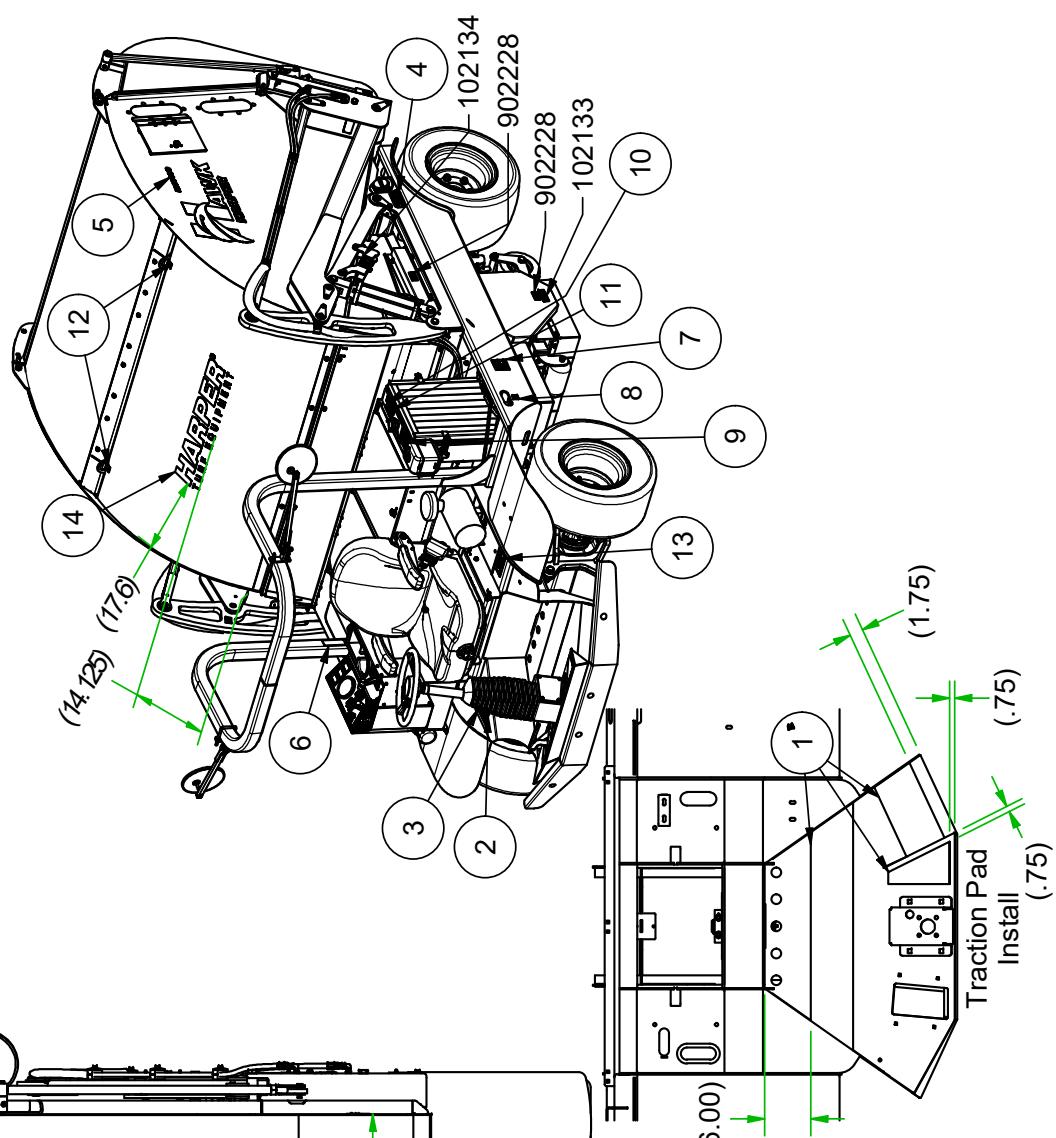
7-23-2020

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REAR VIEW



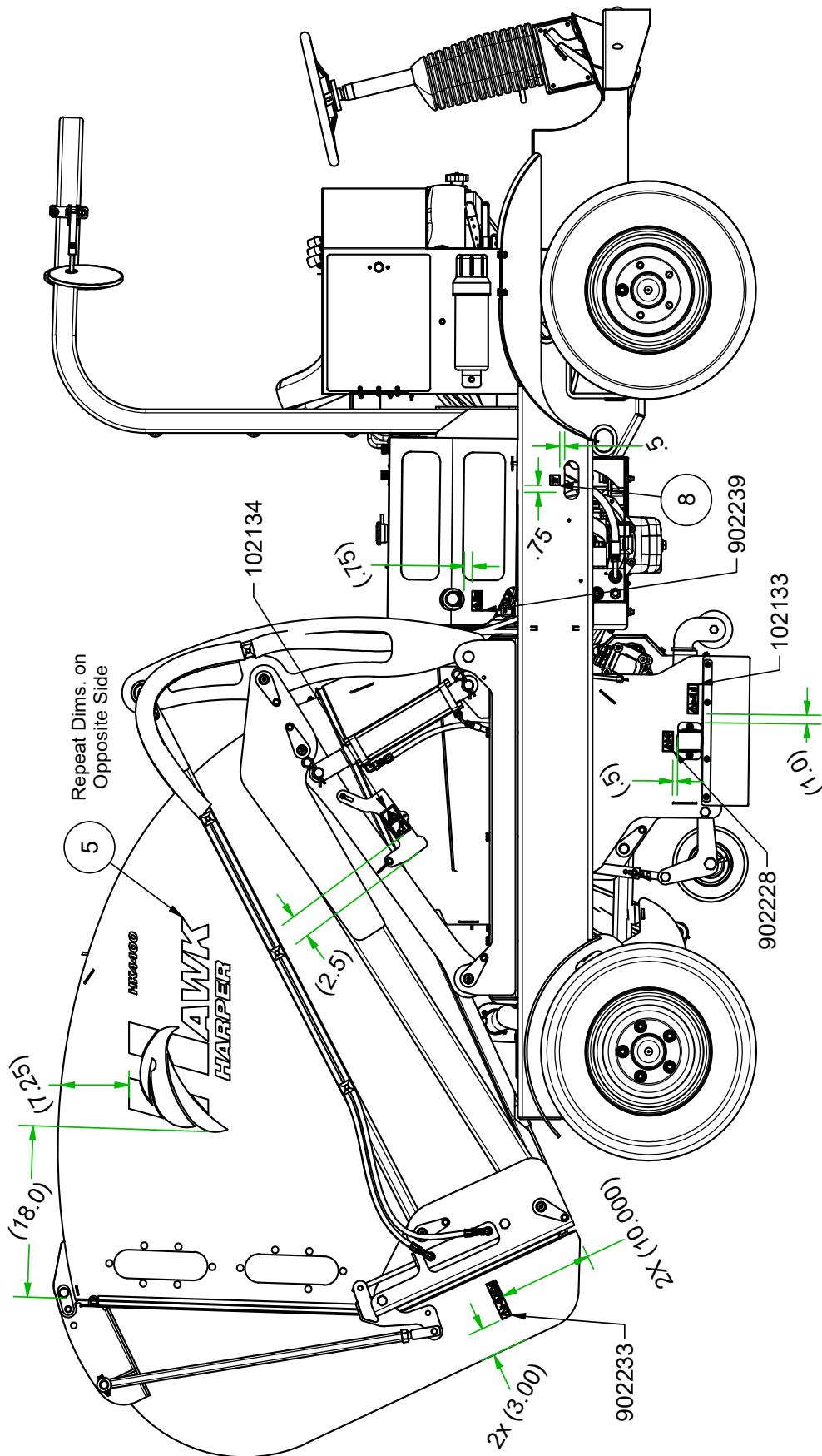
ITEM	QTY	PART #	DESCRIPTION
1	46"	100373	Traction Pad, Flex-tread, 5.5
2	1	202133	Decal, Prop 65, Diesel
3	1	202134	Decal, Prop 65, Short Form
4	1	302106	DECAL, DIESEL FUEL
5	2	302136	Decal, Hawk
6	1	302150	Decal, HK Rops Certification
7	1	800195	DECAL, RECYCLE BATTERY
8	4	802067	Decal, Tie Down Point
9	1	902186	DECAL, EPA STANDARDS
10	1	902231	Decal, Hot Surface, Oil Cooler
11	1	902232	Decal, High Pressure Injection
12	2	902234	Decal, No Lift
13	1	902240	Plate, Serial Number, Harper Turf, Blue
14	1	902242	Decal, Harper Turf Equipment, 30"

DECAL INSTALLATION

7-23-2020

305093

REV: A

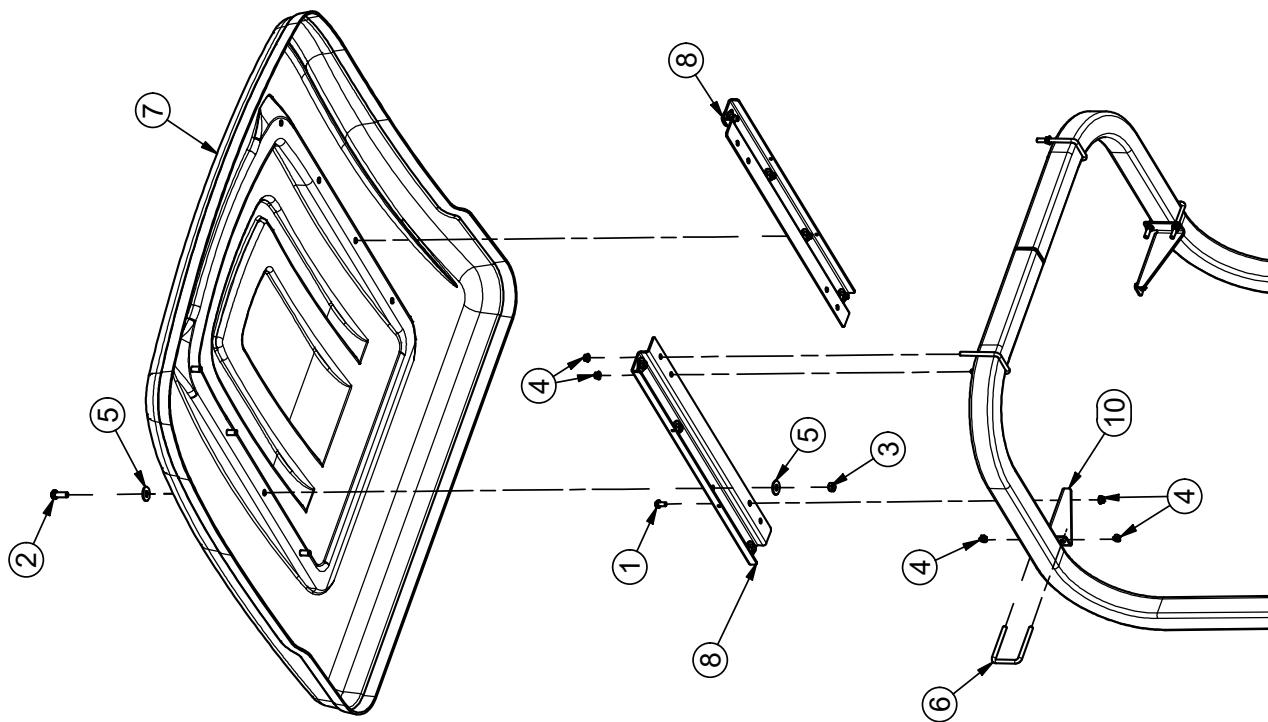


NOTE: ALL DIMENSIONS FOR REFERENCE, PLACE AS CLOSE TO AS SHOWN AND FOR FULL VISIBILITY

CANOPY

FACTORY INSTALL P/N: 300083
CUSTOMER INSTALL P/N: 300082

Parts List			
ITEM	QTY	PART #	DESCRIPTION
1	2	110437	BOLT, 3/8-16 X 0.75, WIZ FLANGE
2	8	110442	BOLT, 1/2-13 X 1.25
3	8	110615	NUT, 1/2-13, UNITORQUE LOCK
4	10	110645	NUT, 3/8-16 WIZ FLANGE
5	16	110658	WASHER, 1/2" FLAT STANDARD
6	4	111185	BOLT, SQUARE U, 3/8-16 X 2.50 X 4.0
7	1	302142	CANOPY, BLACK ABS PLASTIC
8	2	3117332	BRKT, CANOPY SUPPORT
9	1	3117333	BRKT, LH CANOPY MOUNT
10	1	3117334	BRKT, RH CANOPY MOUNT



7-23-2020

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NOTES

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