

CHAPTER 7

Miscellaneous Parts

Stickers and Decals



153-0037



154-0272



154-0274



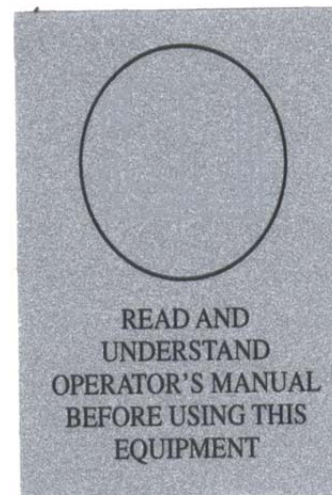
154-0297



154-0266



154-0269



158-0207



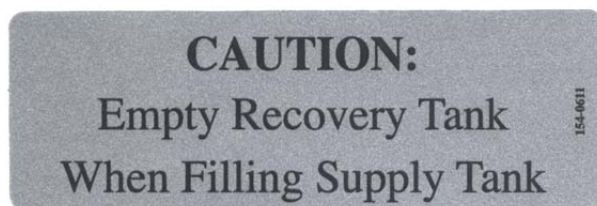
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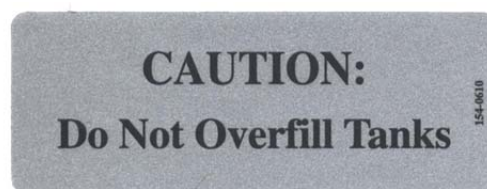
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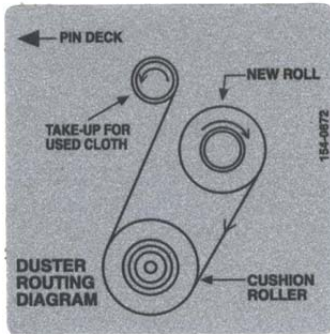
164-0013



154-0611



154-0610



154-0872



154-0270

**HEAD
DRIVE**

153-0850

**OIL
PUMP**

153-0849

Main Drive Speed Control

158-0606

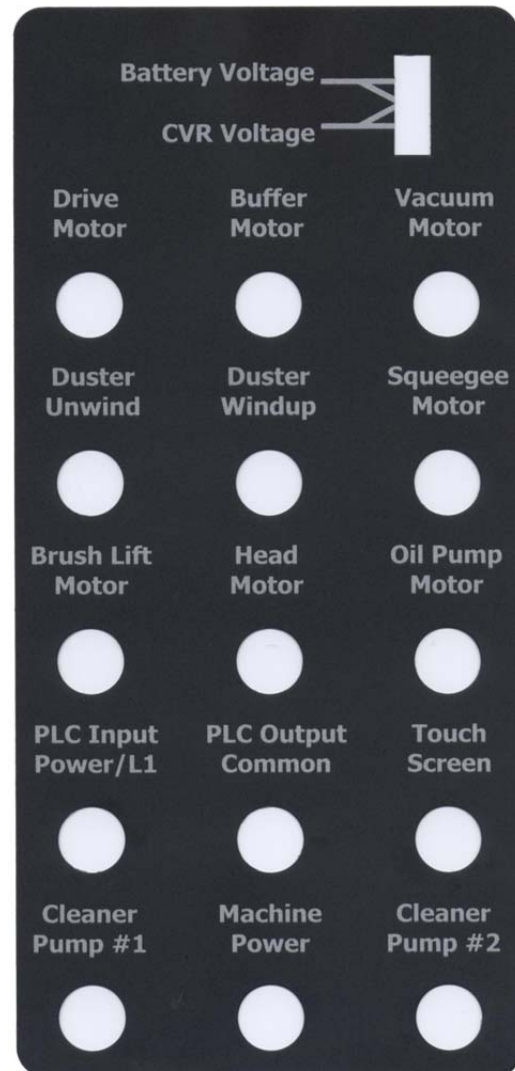
WARNING: To reduce the risk of fire, use only commercially available bowling lane cleaners and conditioners intended for machine application.

154-0262



CAUTION: Moving Parts -
To Reduce The Risk Of Injury,
Unplug Before Servicing.

154-0265



164-0005

FLE

164-0007

FLE

164-0008



164-0009



164-0014



164-0016



164-0015



164-0017

Fittings



Elbow-
1/4" Tube x 1/4" Tube
154-0243



Elbow-
3/8" Tube x 3/8" Tube
154-0256



Elbow-
3/8" NPT x 1/4" Tube - 154-0225
3/8" NPT x 3/8" Tube - 154-0223



Elbow-
1/4" Stem x 1/4" Tube
154-0222



Elbow-
3/8" Stem x 3/8" Tube
154-0258



Elbow-
1/4" Stem x 1/4" Hose Barb
154-0226



Elbow-
3/8" Stem x 5/16" Hose Barb
154-0227



Reducing Union-
1/4" x 3/16" - 154-0248



Union-
1/4" x 1/4" - 154-0241



Male Lure-
1/8" Hose Barb - 154-0863



Female Connector-
1/4" Tube x 1/8" FPT - 154-0257



Male Swivel Elbow-
1/4" Tube x 1/4" NPT
153-0818

CHAPTER 8

Mechanical Drawings

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BATTERIES AND CHARGERS

Rev. 12/13



158-1634 – K2 LITHIUM – 25.6 Ah



158-1634B – K2 LITHIUM – 38.4 Ah



158-1634C – K2 LITHIUM – 51.2 Ah

Battery Quick Disconnects

Red - 158-1407

Blue - 158-1408

ProNautic® Charger and Accessories



164-8471 -

EXTERNAL BATTERY CHARGER ASSEMBLY – 115V

164-8471 E

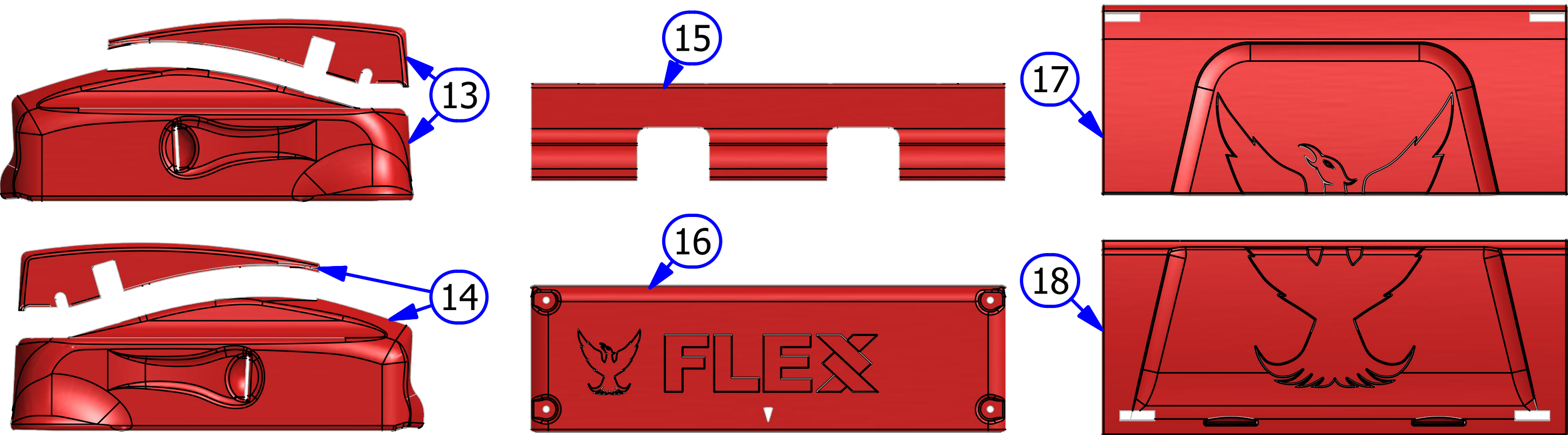
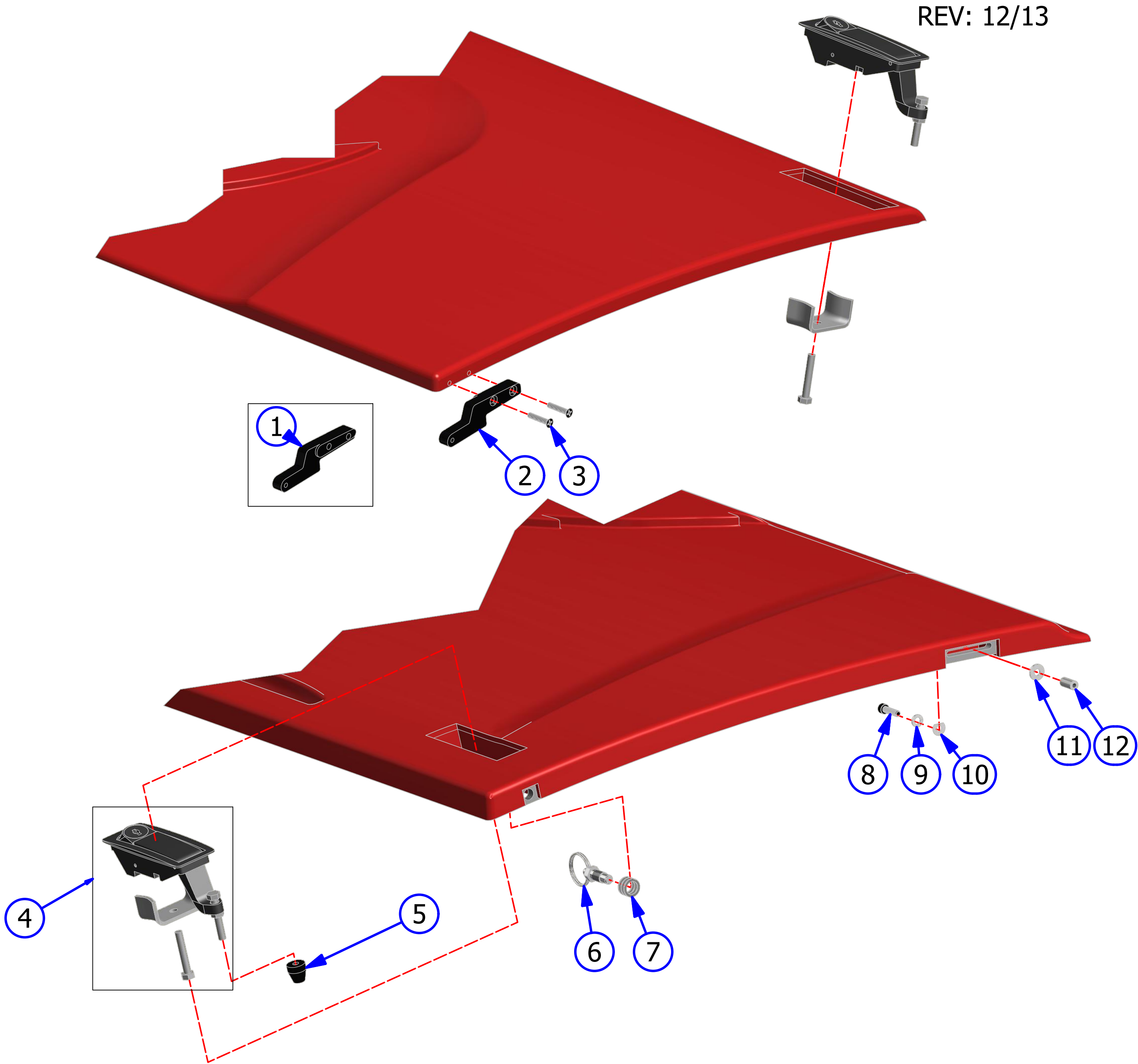
EXTERNAL BATTERY CHARGER ASSEMBLY – 230v

DC Power Cord Assembly – 6FT External – 164-8475

LID AND COVER ASSEMBLY - FLEX

REV. 3/14

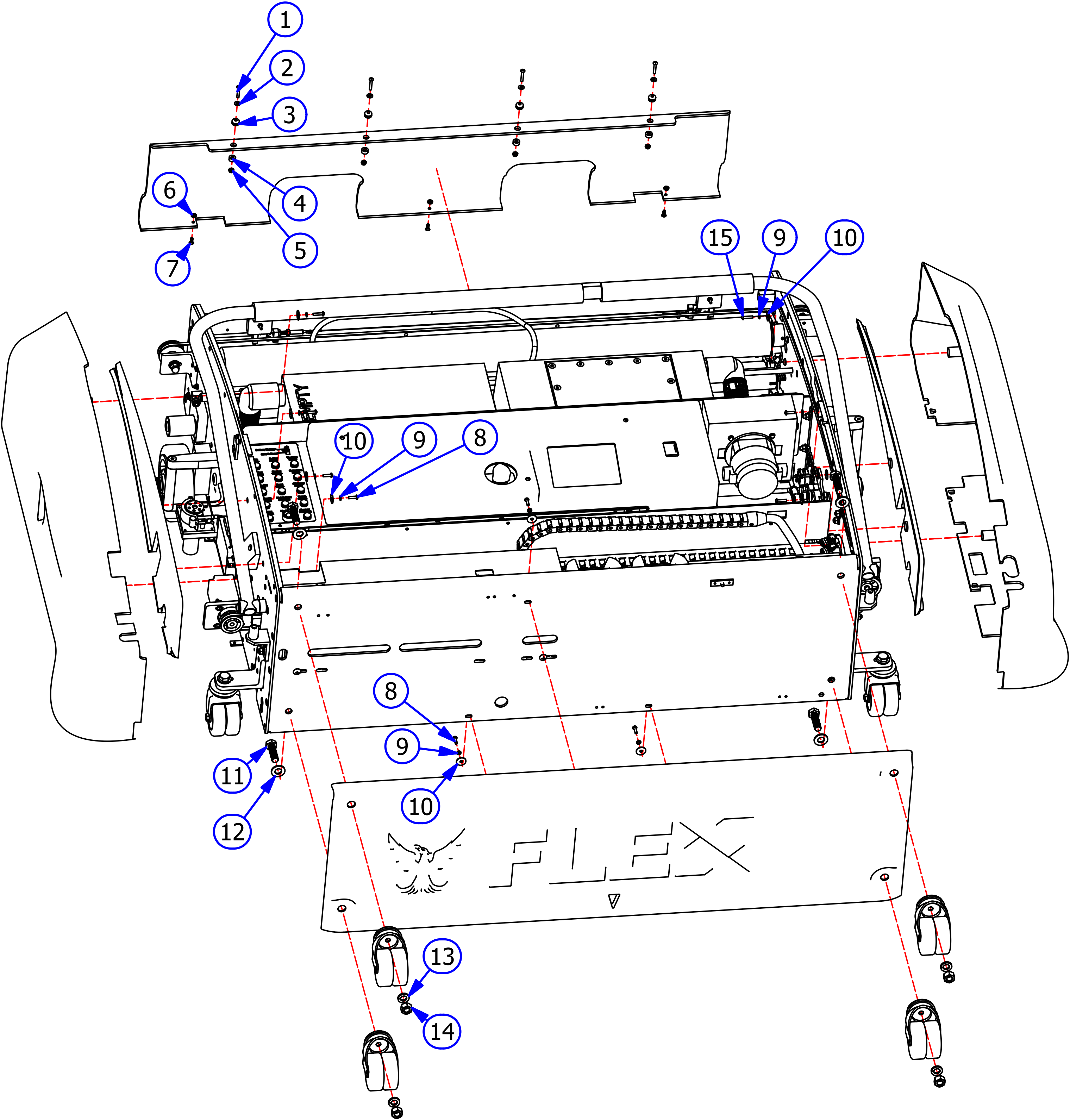
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<u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-6101	HINGE LID PIVOT ARM (RT)	EA
2	1	164-6100	HINGE LID PIVOT ARM (LT)	EA
3	4	164-2022	SCREW 6-32 X 3/4 18-8SS PHIL FHMS BLK OX	EA
4	2	153-2232L	LID LATCH - FLUSH MOUNT WITH LOCK	EA
5	2	164-6164	LID LATCH BUMPER	EA
6	2	164-2002	DETENT-SPRING PLUNGER-3/8-16 THREAD	EA
7	6	164-2041	SHIM FOR SCREW SHOULDER .032 THICK	EA
8	2	153-2986	SCREW 8-32 X 5/8 SHCS BLACK OXIDE	EA
9	2	153-2013	#10 LOCKWASHER	EA
10	2	164-2043	WASHER-ANTI ROTATING D SHAPED # 8	EA
11	2	153-2002	#8 FLATWASHER	EA
12	2	164-2027	STANDOFF FEMALE THREADED 8-32 X 1/2	EA
13	1	164-6724	FLEX LT SIDE GUARD - 2 PC SET (WHITE)	EA
		164-6724-1525	FLEX LT SIDE GUARD - 2 PC SET (BLUE)	EA
		164-6724-2850	FLEX LT SIDE GUARD - 2 PC SET (BLACK)	EA
		164-6724-2911	FLEX LT SIDE GUARD - 2 PC SET (RED)	EA
14	1	164-6723	FLEX RT SIDE GUARD - 2 PC SET (WHITE)	EA
		164-6723-1525	FLEX RT SIDE GUARD - 2 PC SET (BLUE)	EA
		164-6723-2850	FLEX RT SIDE GUARD - 2 PC SET (BLACK)	EA
		164-6723-2911	FLEX RT SIDE GUARD - 2 PC SET (RED)	EA
15	1	164-6725	FRONT BUMPER - WHITE	EA
		164-6725-1525	FRONT BUMPER - BLUE	EA
		164-6725-2850	FRONT BUMPER - BLACK	EA
		164-6725-2911	FRONT BUMPER - RED	EA
16	1	164-8049	FLEX BACK PANEL - WHITE	EA
		164-8049-1525	FLEX BACK PANEL - BLUE	EA
		164-8049-2850	FLEX BACK PANEL - BLACK	EA
		164-8049-2911	FLEX BACK PANEL - RED	EA
17	1	164-8031F	CLEANER COMPARTMENT LID - RED	EA
		164-8033F	CLEANER COMPARTMENT LID - BLACK	EA
		164-8035F	CLEANER COMPARTMENT LID - WHITE	EA
		164-8037F	CLEANER COMPARTMENT LID - BLUE	EA
18	1	164-8031	SLIDING LID ASSEMBLY - RED	EA
		164-8033	SLIDING LID ASSEMBLY - BLACK	EA
		164-8035	SLIDING LID ASSEMBLY - WHITE	EA
		164-8037	SLIDING LID ASSEMBLY - BLUE	EA
19	1	164-8039	LEFT CABLE REEL ASSEMBLY	EA
20	1	164-8040	RIGHT CABLE REEL ASSEMBLY	EA



PANEL EXPLOSION - FLEX

REV. 6/14

<u>INDEX</u>		<u>PART</u>			
<u>NUMBER</u>	<u>QTY.</u>	<u>NUMBER</u>	<u>DESCRIPTION</u>		<u>UOM</u>
1	4	153-2089	MS PHILLIPS - 8-32 X 1		EA
2	4	153-2002	#8 FLATWASHER		EA
3	4	164-0019	GROMMET 3/16 ID X 9/16 OD		EA
4	4	164-2038	RUBBER BUMPER SBR		EA
5	4	153-2019	LOCKNUT - 8-32 (NYLOK)		EA
6	3	164-2051	THIN HEX LOCKNUT - 8-32		EA
7	3	153-2817	FHMS-8-32 X 1/2		EA
8	7	153-2086	MS PHILLIPS - 8-32 X 5/8		EA
9	11	153-2013	#10 LOCKWASHER		EA
10	11	153-2953	FENDER WASHER - #8		EA
11	4	164-2039	HHCS 1/2-13 X 1 3/4 GRADE 5		EA
12	4	153-2007	1/2 FLATWASHER		EA
13	4	153-2017	1/2 LOCKWASHER		EA
14	4	153-2026	HEX NUT - 1/2-13		EA
15	4	153-2087	MS PHILLIPS - 8-32 X 3/4		EA



TOP VIEW - FLEX

REV. 1/14

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	158-8414	BUFFER MOTOR - 24VDC - 500RPM - STANDARD	EA
	1	158-1406B	BUFFER MOTOR BRUSHES (PAIR)	PR
	1	164-9006	BUFFER BELT	EA
	1	158-9401	PULLEY (14 TOOTH 1/2" BORE)	EA
1	1	164-8014	BUFFER MOTOR - 24VDC - 700RPM - VARIABLE BUFFER	EA
	1	158-1405B	BUFFER MOTOR BRUSHES (PAIR)	PR
	1	154-9615	BUFFER BELT (FLX-17733 / FXW-13229 AND ABOVE)	EA
		164-9006	BUFFER BELT (FLX-17732 / FXW-13228 AND BELOW)	
	1	164-9014	BUFFER PULLEY (FLX-17733 / FXW-13229 AND ABOVE)	EA
		164-9012	BUFFER PULLEY (FLX-17732 / FXW-13228 AND BELOW)	
2	1	158-8602	DRIVE MOTOR 24V EXTENDED SHAFT	EA
	1	158-1405B	DRIVE MOTOR BRUSHES (PAIR)	PR
	1	154-9601	CHAIN (FOR 153-9002 SPROCKET)	EA
	1	153-9047	MASTER LINK #40	EA
	1	153-9048	OFFSET LINK #40	EA
	1	153-9002	SPROCKET - 40B13 (5/8 IN)	EA
3	1	158-8407	VACUUM MOTOR - 24VDC	EA
4	1	158-8404D	CLEANER PUMP ASSEMBLY	EA
	1	154-0861B	NORPRENE TUBING FOR CLEANER PUMP ASSEMBLY	EA
5	1	158-8404	CLEANER PUMP MOTOR - 24VDC	EA

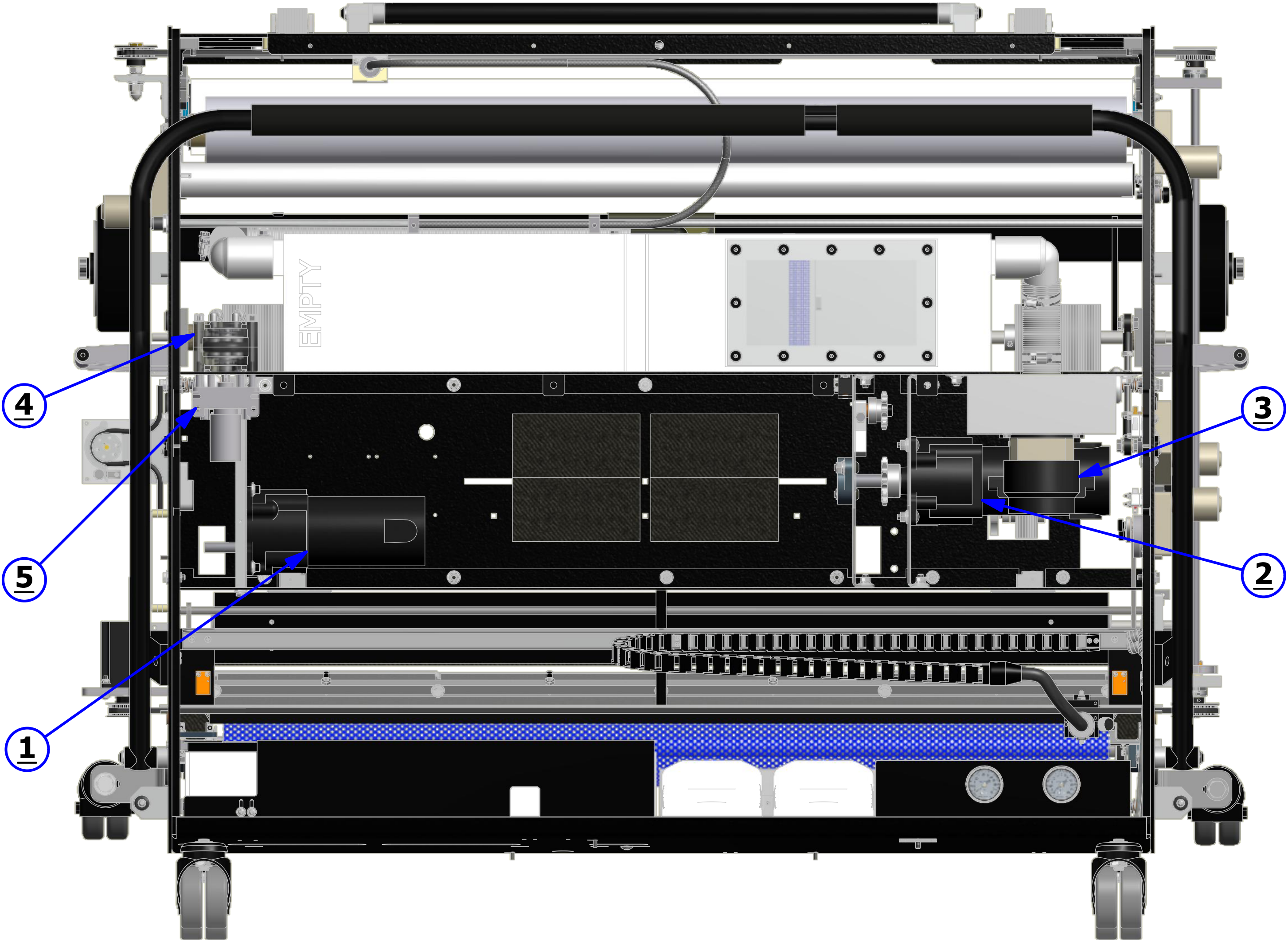


TECHNICAL NOTE

THESE CHANGES WERE MADE FOR THE VARIABLE SPEED BUFFER UPGRADE ONLY.

PART NUMBER 164-9012 IS A 15-TOOTH PULLEY ASSEMBLY AND USES BUFFER BELT PART NUMBER 164-9006.

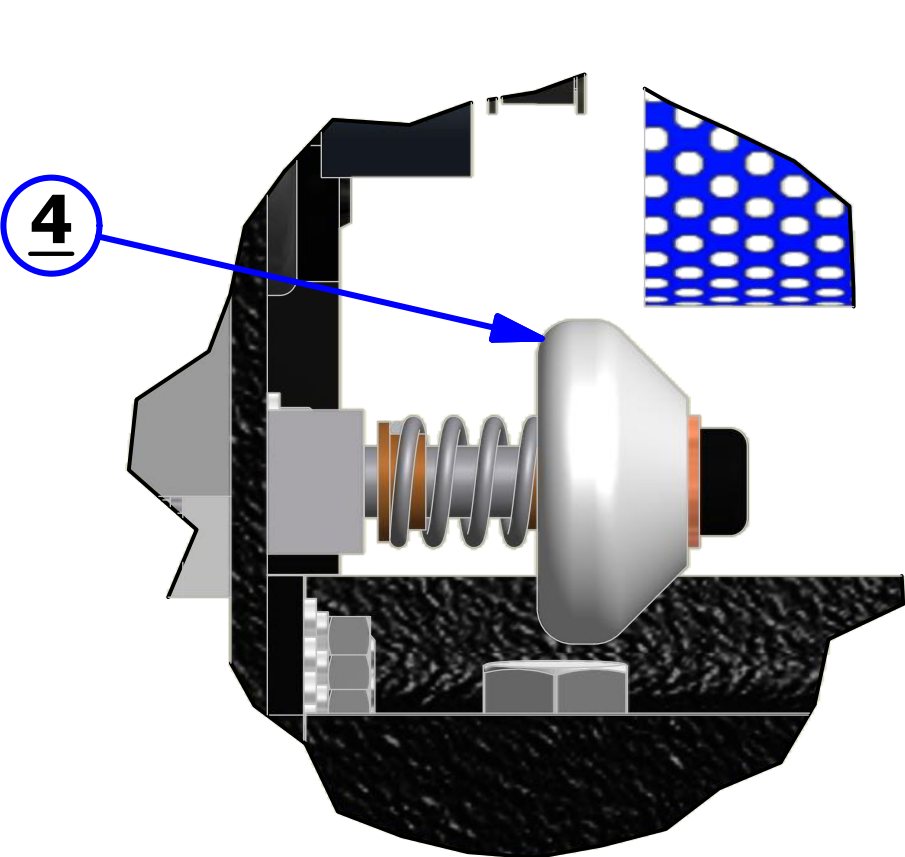
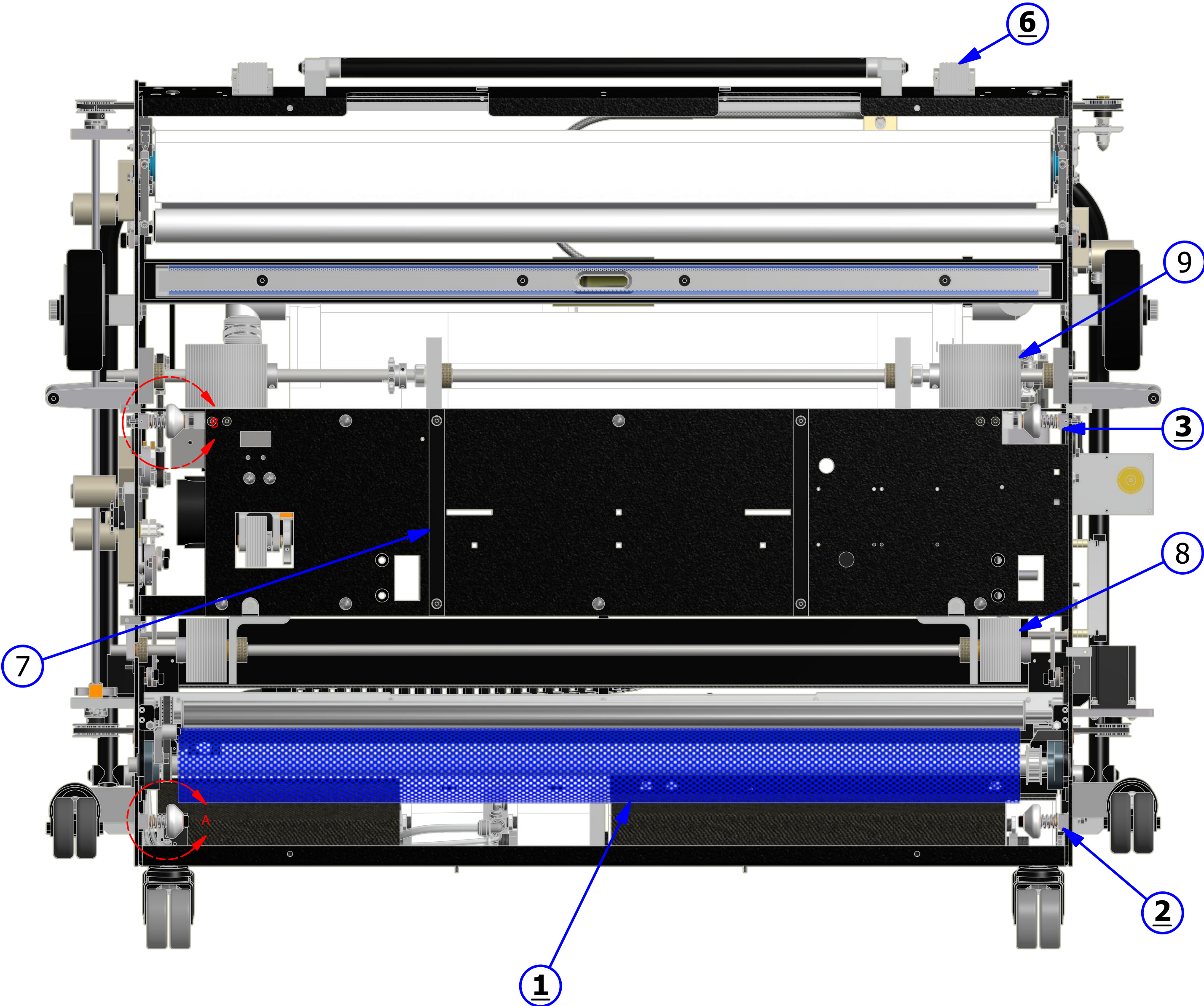
PART NUMBER 164-9014 IS A 16-TOOTH PULLEY ASSEMBLY AND USES BUFFER BELT PART NUMBER 154-9615.



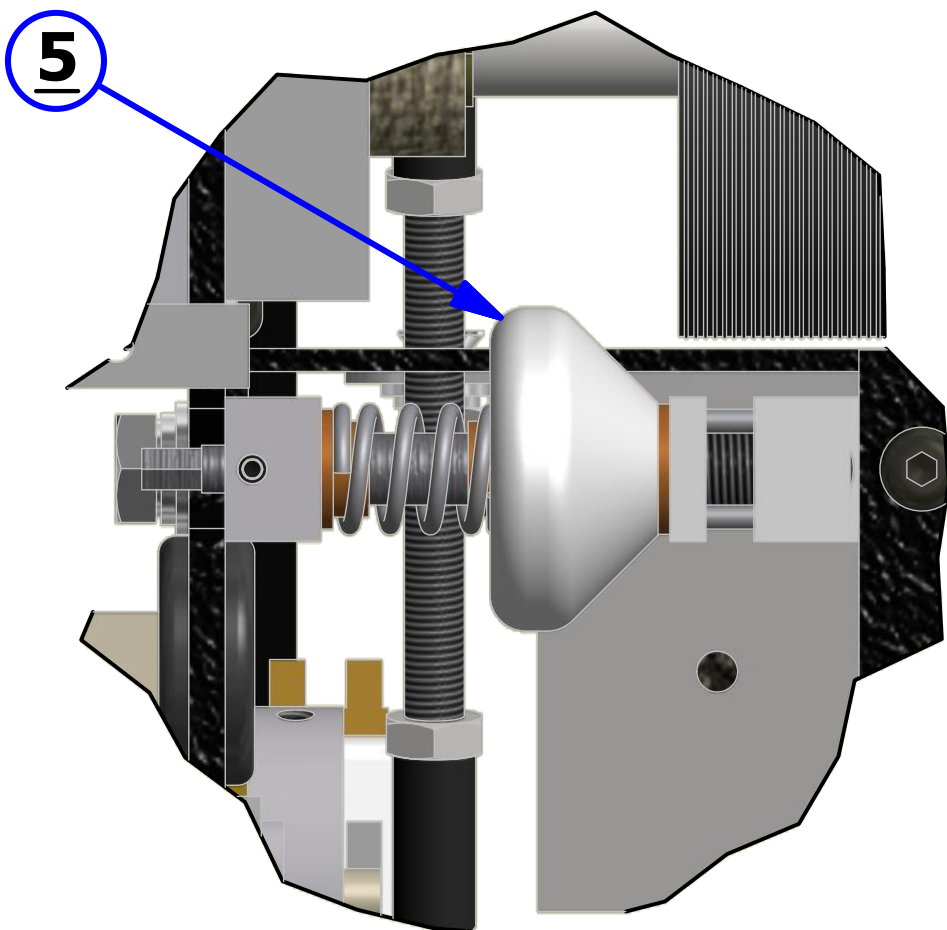
BOTTOM - FLEX

REV. 1/14

<u>INDEX</u>		<u>PART</u>		
<u>NUMBER</u>	<u>QTY.</u>	<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8001	BUFFER BRUSH ASSEMBLY	EA
	1	164-9006	BUFFER BELT ASSY. NON-VARIABLE	EA
	1	154-9615	BUFFER BELT ASSEMBLY - VARIABLE BUFF	EA
2	2	158-8642	REAR GUIDE WHEEL ASSEMBLY - COMPLETE <i>THE BELOW ATTACHED PARTS ARE NOT SHOWN</i>	EA
2.1	2	153-2407	SHOULDER BOLT 3/8 X 1 3/4	EA
2.2	2	153-2978	SPRING - COMPRESSION FOR GUIDE WHEEL	EA
2.3	2	158-8636	GUIDE WHEEL ASSEMBLY - REAR	EA
3	2	158-8643	FRONT GUIDE WHEEL ASSEMBLY - COMPLETE <i>THE BELOW ATTACHED PARTS ARE NOT SHOWN</i>	EA
3.1	2	153-9803	FLANGED BUSHING - 3/8 X 1/2 X 3/4	EA
3.2	2	153-2978	SPRING - COMPRESSION FOR GUIDE WHEEL	EA
3.3	2	158-8637	GUIDE WHEEL ASSEMBLY - FRONT	EA
	2	153-6006	MOMENTARY WHEEL SHAFT	EA
	2	153-6029	MOMENTARY WHEEL HOUSING ASSEMBLY	EA
7	2	153-9803	SKID GUIDE	EA
8	2	153-7002AA	LDS/DRIVE WHEEL ASSEMBLY	EA
9	2	153-7013	DRIVE WHEEL ASSEMBLY	EA



DETAIL A

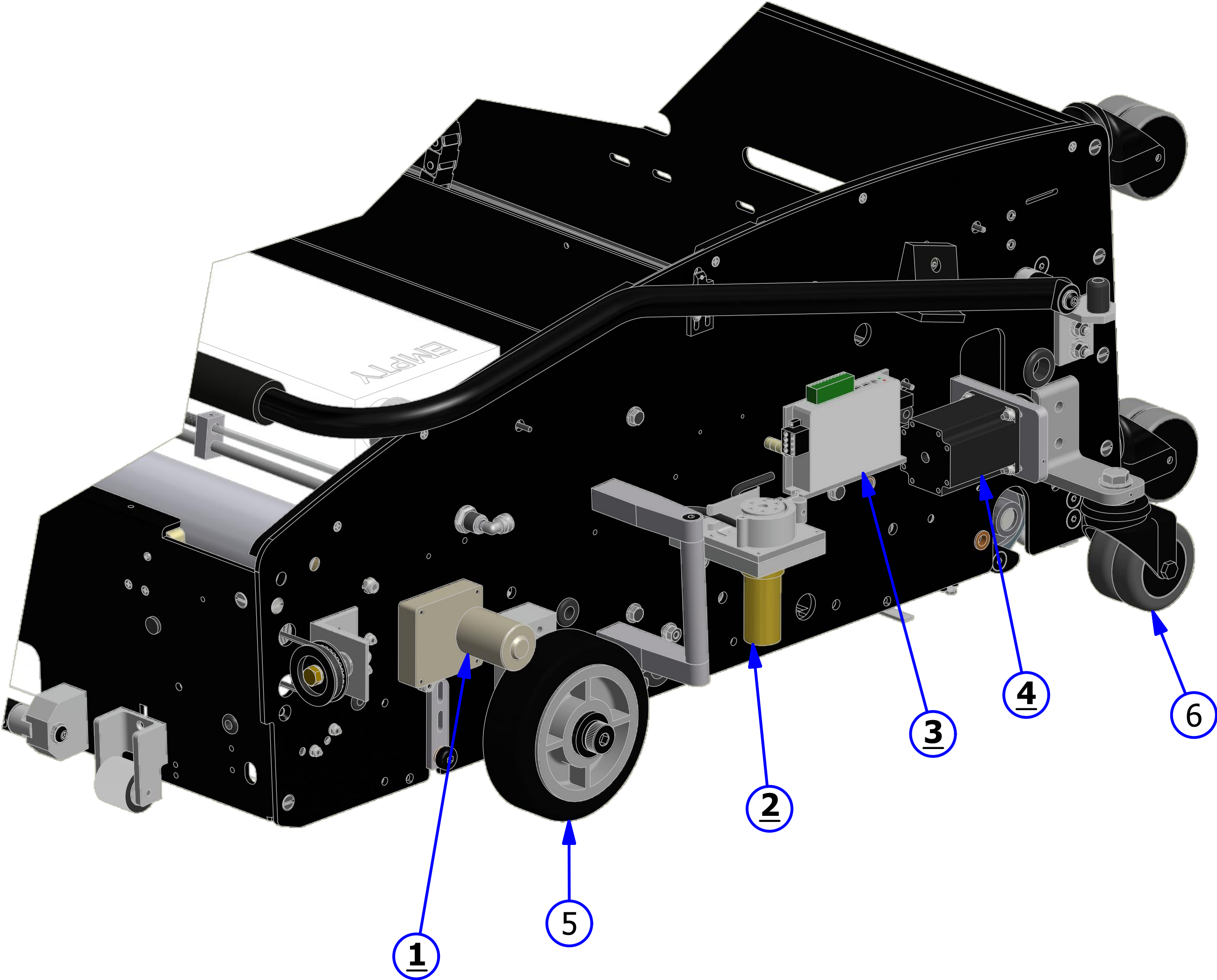


DETAIL B

LEFT SIDE - FLEX

REV. 1/14

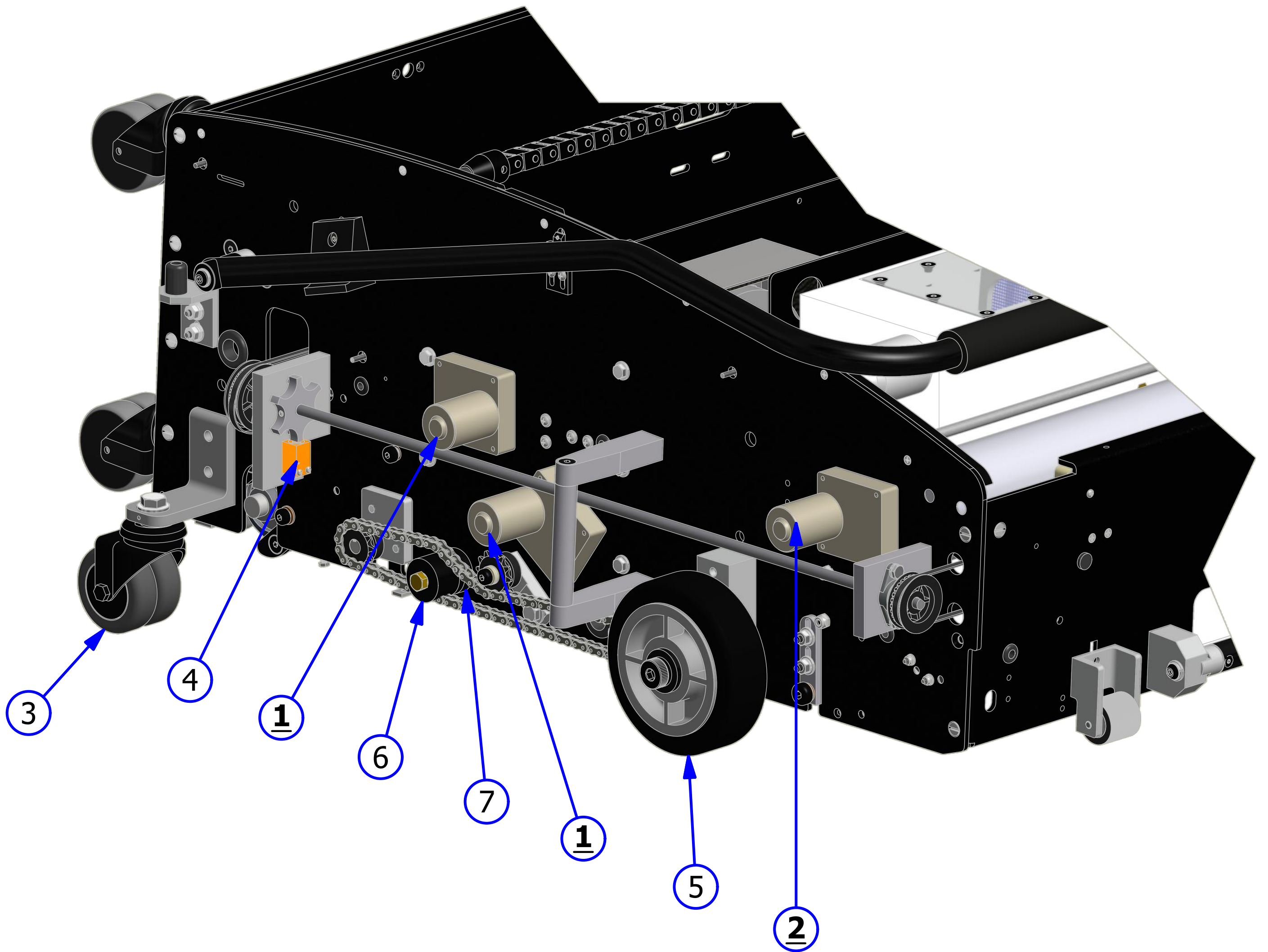
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1	2	158-8403	ASSEMBLY - DUSTER MOTOR 24VDC	EA
2	1	164-8027	CLEANER PUMP ASSEMBLY - CONCENTRATE (UPGRADE ONLY)	EA
		164-8025	CLEANER TUBING #14 FOR SUPER CONCENTRATE	EA
		164-8026	CLEANER TUBING #16 FOR REG CONCENTRATE	EA
3	1	158-1605	SPEED CONTROL - BERG	EA
4	1	164-8032	HEAD DRIVE MOTOR ASSEMBLY	EA
5	2	158-7002	6" WHEEL ASSEMBLY	EA
6	6	153-0001BK	CASTER ASSEMBLY (3 INCH DUAL WHEEL)- BLACK	EA



RIGHT SIDE - FLEX

REV. 1/14

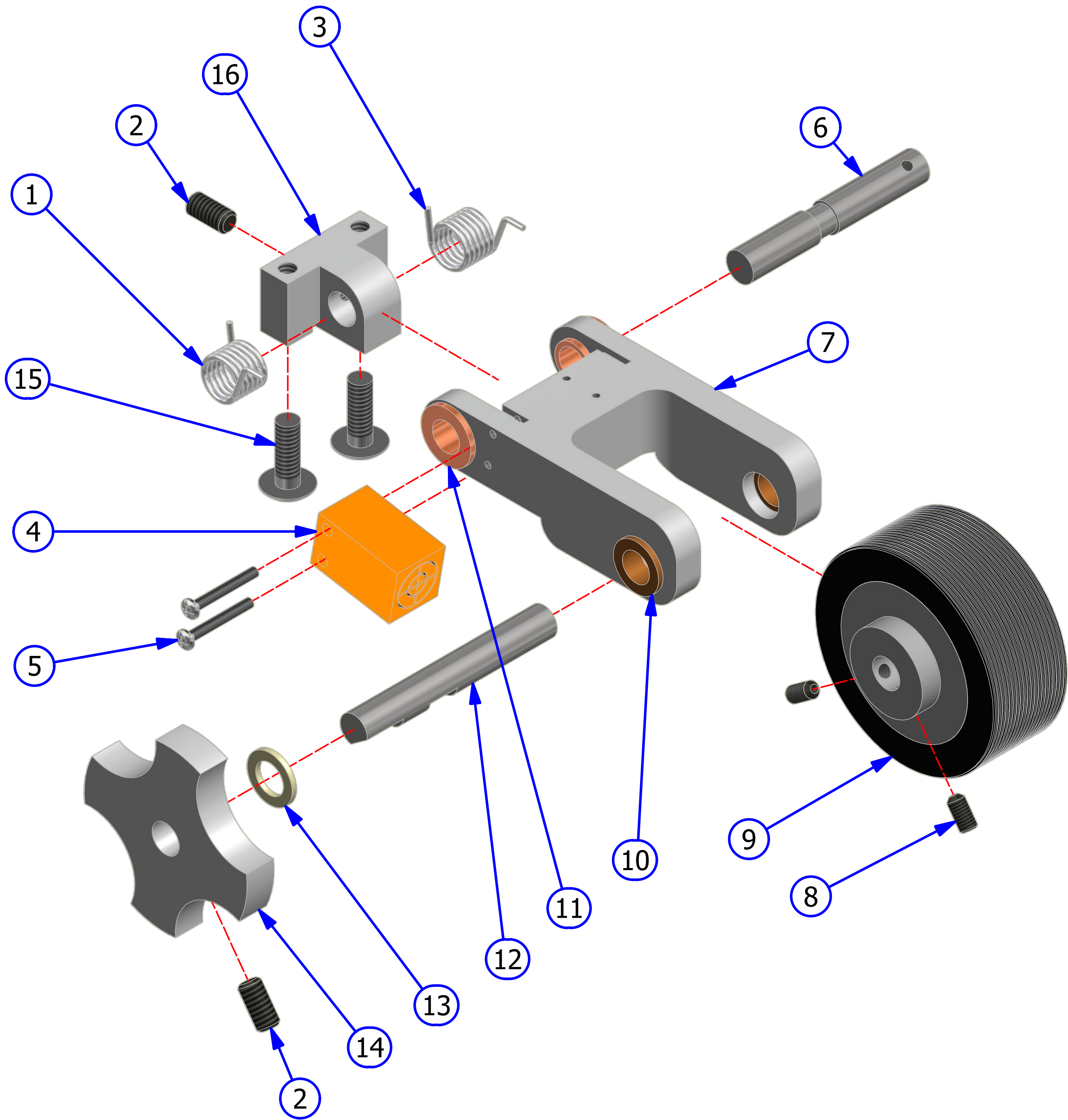
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1	2	158-8402	SQUEEGEE / BRUSH LIFT MOTOR - 24VDC	EA
2	2	158-8403	DUSTER MOTOR ASSEMBLY - 24VDC	EA
3	6	153-0001BK	CASTER ASSEMBLY (3 INCH DUAL WHEEL)- BLACK	EA
4	1	154-1220	PROXIMITY SENSOR	EA
5	2	153-7002	6" WHEEL ASSEMBLY	EA
6	1	164-6154	FLEX CHAIN HUB ASSEMBLY - OUTSIDE	EA
7	1	164-6154A	FLEX CHAIN HUB ASSEMBLY - INSIDE	EA



LDS ASSEMBLY - FLEX

REV. 1/14

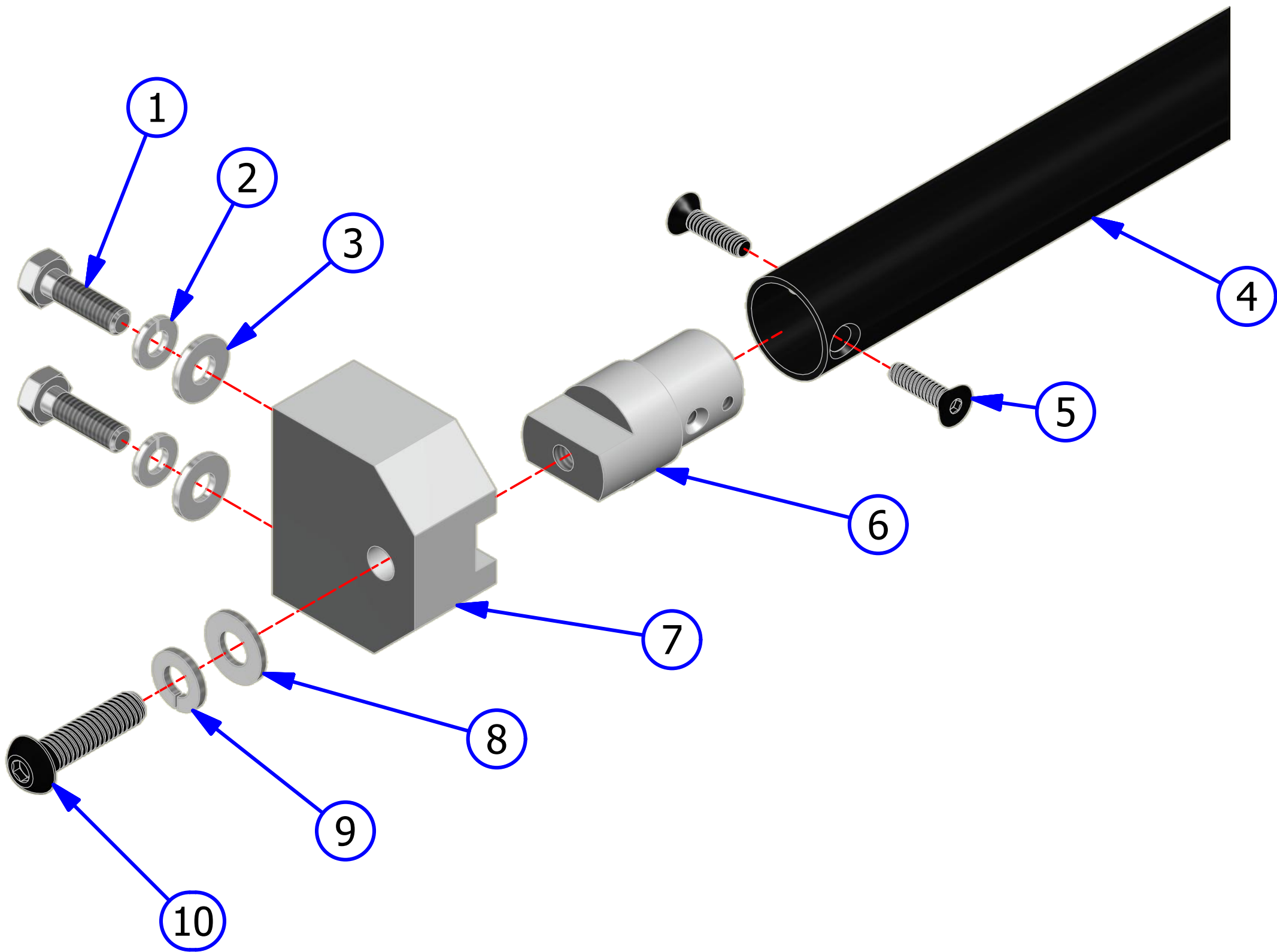
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<u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	153-2944	TORSION SPRING - RH	EA
2	2	153-2051	SET SCREW - 1/4-20 X 1/2	EA
3	1	153-2945	TORSION SPRING - RH	EA
4	2	154-1220	INDUCTIVE PROXIMITY SENSOR (TL-Q5MC1)	EA
5	4	153-2216A	MS PHILLIPS - 4-40 X 7/8	EA
6	1	164-6129	LDS ARM SHAFT	EA
7	1	164-6127	LDS ARM	EA
8	2	153-2201	SET SCREW - 10-32 X 3/8	EA
9	1	164-7001	LDS COUNTER WHEEL	EA
10	2	153-9803	FLANGED BUSHING (3/8 X 1/2 X 1/4)	EA
11	2	154-9617	FLANGED BUSHING 3_8 x 1_2 x 3_8	EA
12	1	164-6130	LDS WHEEL SHAFT	EA
13	1	153-2009	NYLON FLAT WASHER (3/8 - 0.060)	EA
14	1	164-6131	FLEX LDS DISK	EA
15	2	153-2924	MS PHILLIPS - 1/4-20 X 3/4 TRUSS HEAD	EA
16	1	164-6128	LDS ARM MOUNT	EA



FRONT HANDLE ASSEMBLY - FLEX

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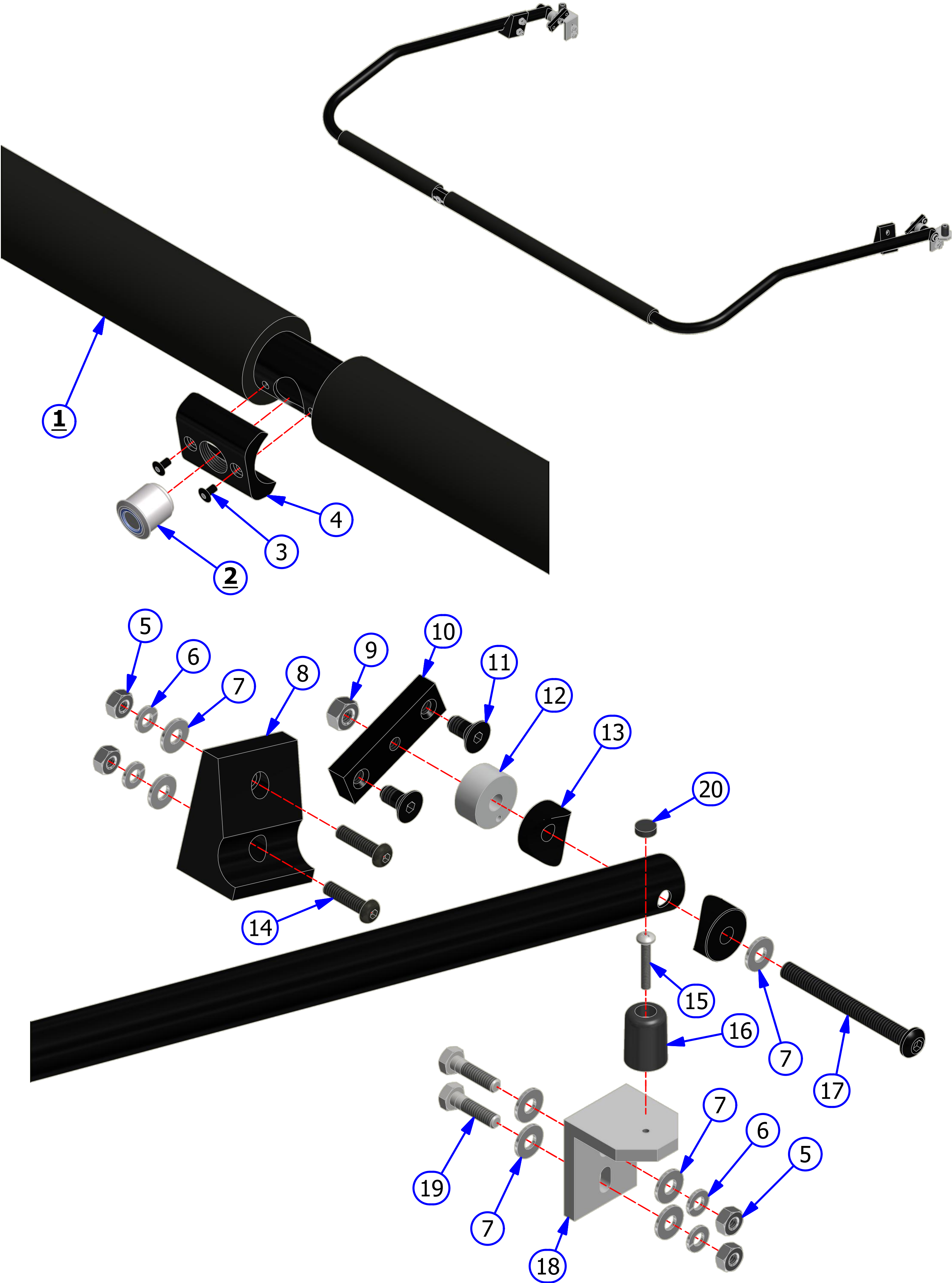
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<u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	4	153-2052	HHCS - 1/4-20 X 7/8	EA
2	4	153-2014	1/4 LOCKWASHER	EA
3	4	153-2004	1/4 FLATWASHER	EA
4	1	164-6073	FRONT HANDLE	EA
5	4	153-2996	SCREW - FHCS 10-24 X 3/4 BLACK OXIDE	EA
6	2	164-6072	FRONT HANDLE PLUG	EA
7	2	164-6087	FRONT HANDLE BRACKET	EA
8	2	153-2005	5/16 FLATWASHER	EA
9	2	153-2015	5/16 LOCKWASHER	EA
10	2	164-2045	BHSCS 5/16-18 X 1-1/4	EA



HANDLE ASSEMBLY - FLEX

REV. 1/14

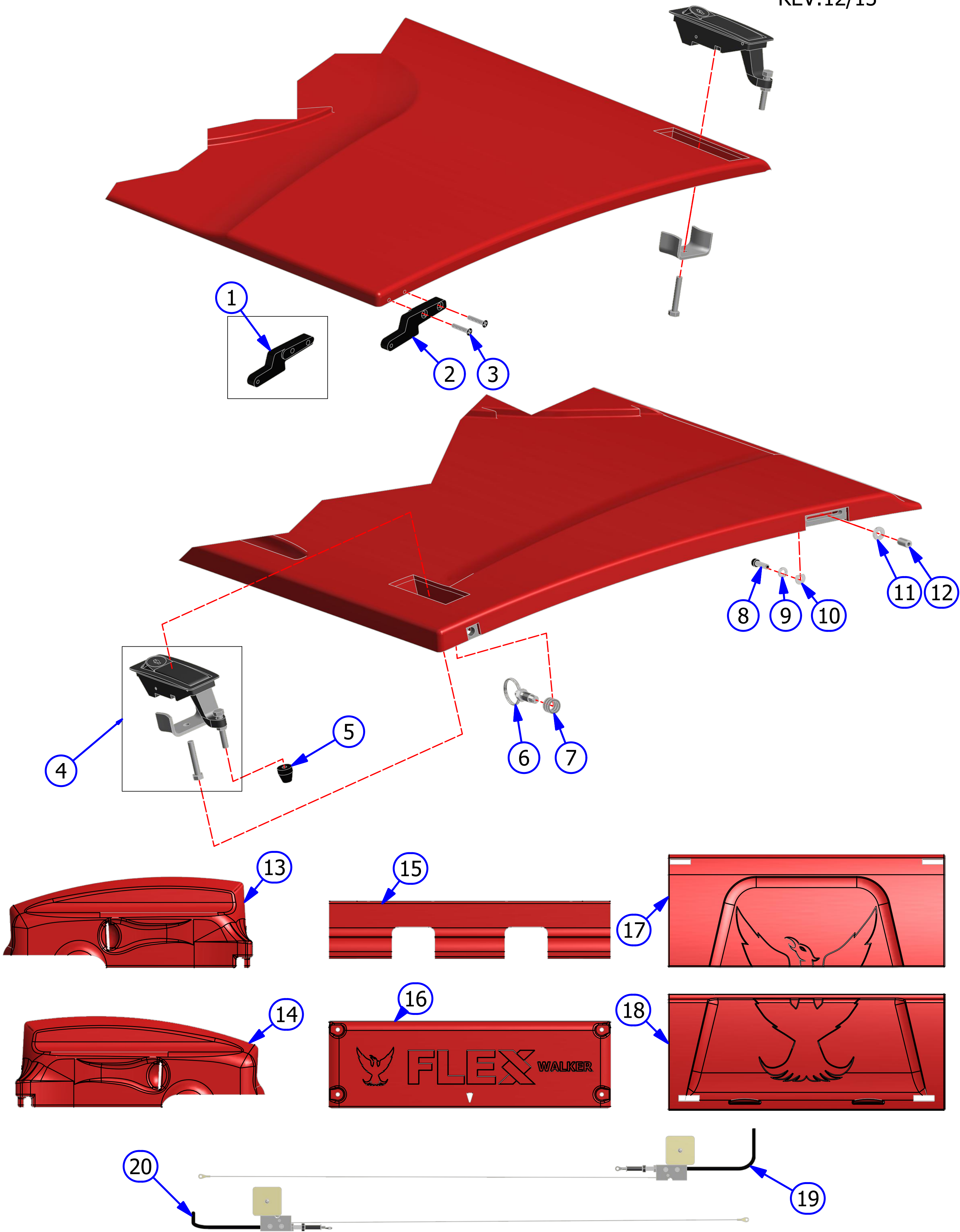
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1	1	164-8012	HANDLE ASSEMBLY (Complete)	EA
2	1	164-8013	HANDLE BUTTON REPLACEMENT ASSEMBLY (w/wires)	EA
3	2	164-2013	RIVET-DOMED-BLACK-1/8 DIA	EA
4	1	164-6083	BUTTON COLLAR	EA
5	8	153-2023	1/4-20 HEX NUT	EA
6	8	153-2014	1/4 LOCKWASHER	EA
7	14	153-2004	1/4 FLATWASHER	EA
8	2	164-6057	HANDLE CATCH	EA
9	2	153-2116	NYLOCK - 5/16-18	EA
10	2	164-6084	FLEX HANDLE MOUNT	EA
11	4	153-2802	FHSS - 5/16-18 X 5/8	EA
12	2	164-6058	FLEX HANDLE SPACER	EA
13	4	164-2001	UNTHREADED CURVED SPACER BLACK	EA
14	4	153-2053A	BHSS - 1/4-20 X 1	EA
15	2	153-2089	MS PHILLIPS - 8-32 X 1	EA
16	2	164-2011	RUBBER BUMPER-3/4 DIA X 1 HIGH	EA
17	2	164-2028	BHSCS 5/13-18 X 3 FULL THREAD	EA
18	2	164-6081	FLEX HANDLE BUMPER MT	EA
19	4	153-2053	HHCS - 1/4-20 X 1	EA
20	2	164-6946	POLYURETHANE BUMPER PLUG	IN



LID AND COVER ASSEMBLY - FLEX WALKER

REV. 1/14

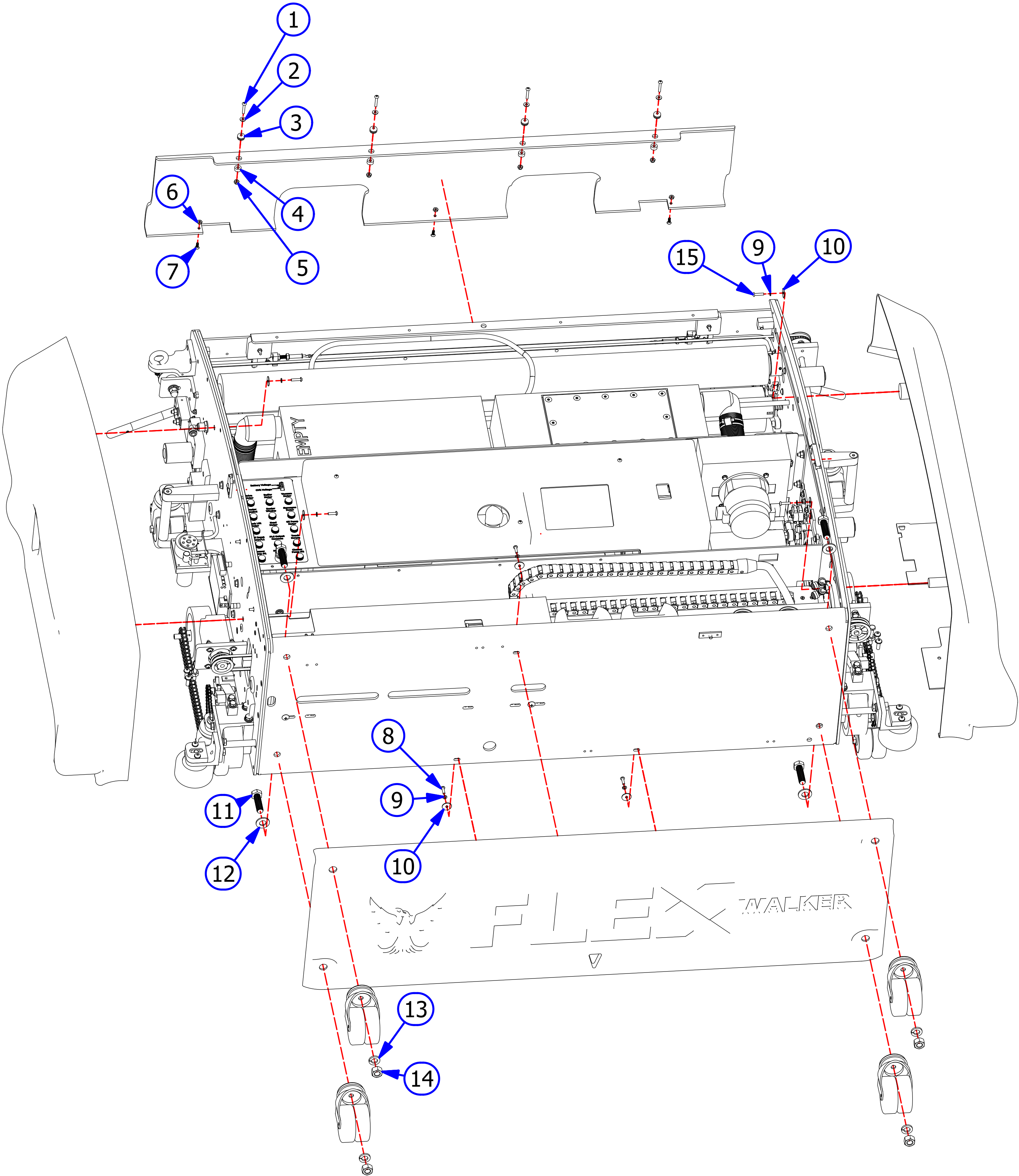
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-6101	HINGE LID PIVOT ARM (RT)	EA
2	1	164-6100	HINGE LID PIVOT ARM (LT)	EA
3	4	164-2022	SCREW 6-32 X 3/4 18-8SS PHIL FHMS BLK OX	EA
4	2	153-2232L	LID LATCH - FLUSH MOUNT WITH LOCK	EA
5	2	164-6164	LID LATCH BUMPER	EA
6	2	164-2002	DETENT-SPRING PLUNGER-3/8-16 THREAD	EA
7	6	164-2041	SHIM FOR SCREW SHOULDER .032 THICK	EA
8	2	153-2986	SCREW 8-32 X 5/8 SHCS BLACK OXIDE	EA
9	2	153-2013	#10 LOCKWASHER	EA
10	2	164-2043	WASHER-ANTI ROTATING D SHAPED # 8	EA
11	2	153-2002	#8 FLATWASHER	EA
12	2	164-2027	STANDOFF FEMALE THREADED 8-32 X 1/2	EA
13	1	164-6722	FLEX WALKER LT SIDE GUARD	EA
14	1	164-6721	FLEX WALKER RT SIDE GUARD	EA
15	1	164-6725	FRONT BUMPER - WHITE	EA
		164-6725-152	FRONT BUMPER - BLUE	EA
		164-6725-285	FRONT BUMPER - BLACK	EA
		164-6725-291	FRONT BUMPER - RED	EA
16	1	164-8049	FLEX BACK PANEL - WHITE	EA
		64-8049-152	FLEX BACK PANEL - BLUE	EA
		64-8049-285	FLEX BACK PANEL - BLACK	EA
		64-8049-291	FLEX BACK PANEL - RED	EA
17	1	164-8031F	CLEANER COMPARTMENT LID - RED	EA
		164-8033F	CLEANER COMPARTMENT LID - BLACK	EA
		164-8035F	CLEANER COMPARTMENT LID - WHITE	EA
		164-8037F	CLEANER COMPARTMENT LID - BLUE	EA
18	1	164-8031	SLIDING LID ASSEMBLY - RED	EA
		164-8033	SLIDING LID ASSEMBLY - BLACK	EA
		164-8035	SLIDING LID ASSEMBLY - WHITE	EA
		164-8037	SLIDING LID ASSEMBLY - BLUE	EA
19	1	164-8039	LEFT CABLE REEL ASSEMBLY	EA
20	1	164-8040	RIGHT CABLE REEL ASSEMBLY	EA



PANEL EXPLOSION - FLEX WALKER

REV. 6/14

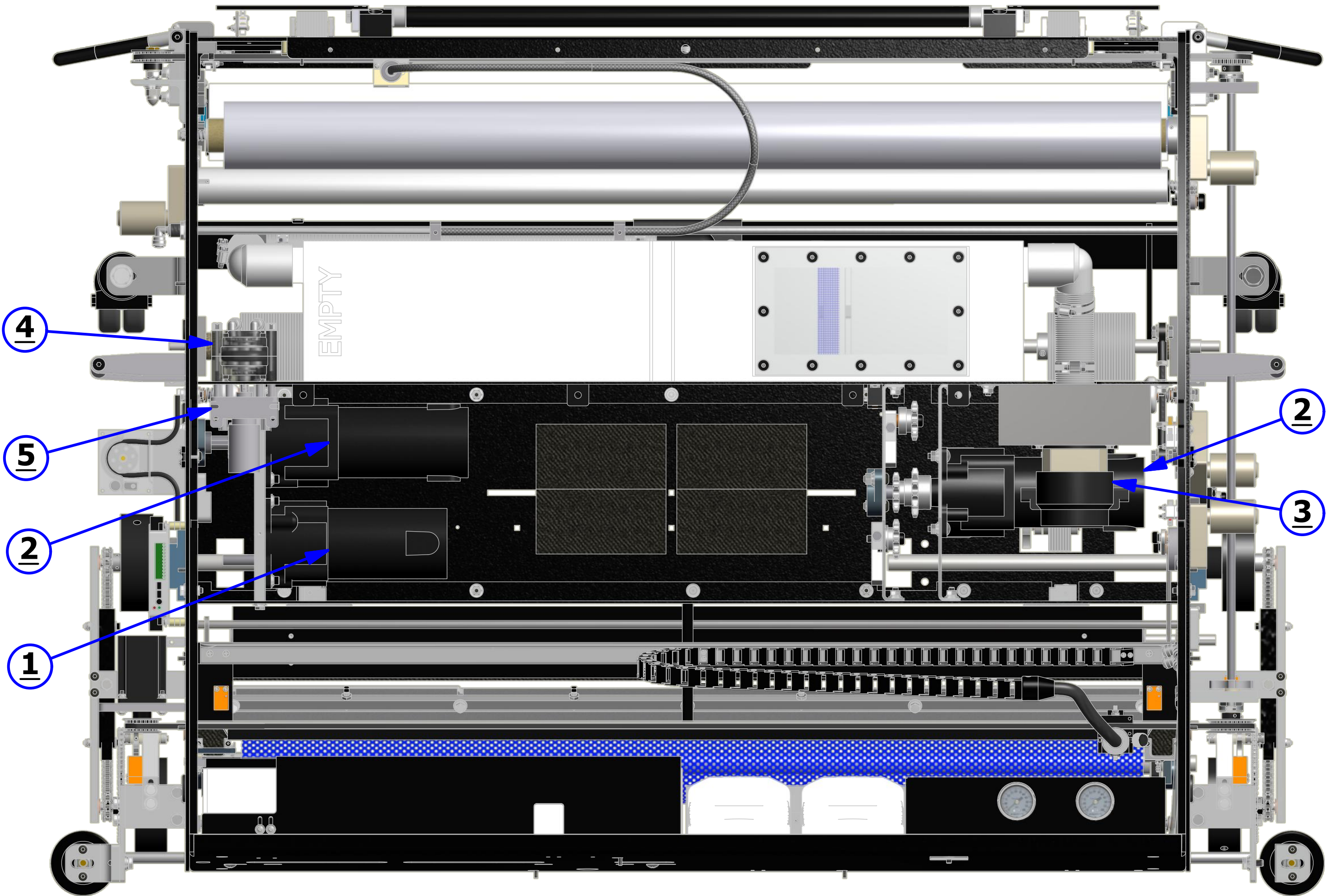
<u>INDEX</u>		<u>PART</u>			
<u>NUMBER</u>	<u>QTY.</u>	<u>NUMBER</u>	<u>DESCRIPTION</u>		<u>UOM</u>
1	4	153-2089	MS PHILLIPS - 8-32 X 1		EA
2	4	153-2002	#8 FLATWASHER		EA
3	4	164-0019	GROMMET 3/16 ID X 9/16 OD		EA
4	4	164-2038	RUBBER BUMPER SBR		EA
5	4	153-2019	LOCKNUT - 8-32 (NYLOK)		EA
6	3	164-2051	THIN HEX LOCKNUT - 8-32		EA
7	3	153-2817	FHMS-8-32 X 1/2		EA
8	3	153-2086	MS PHILLIPS - 8-32 X 5/8		EA
9	11	153-2013	#10 LOCKWASHER		EA
10	11	153-2953	FENDER WASHER - #8		EA
11	4	164-2039	HHCS 1/2-13 X 1 3/4 GRADE 5		EA
12	4	153-2007	1/2 FLATWASHER		EA
13	4	153-2017	1/2 LOCKWASHER		EA
14	4	153-2026	HEX NUT - 1/2-13		EA
15	4	153-2087	MS PHILLIPS - 8-32 X 3/4		EA



TOP VIEW - FLEX WALKER

REV. 1/18

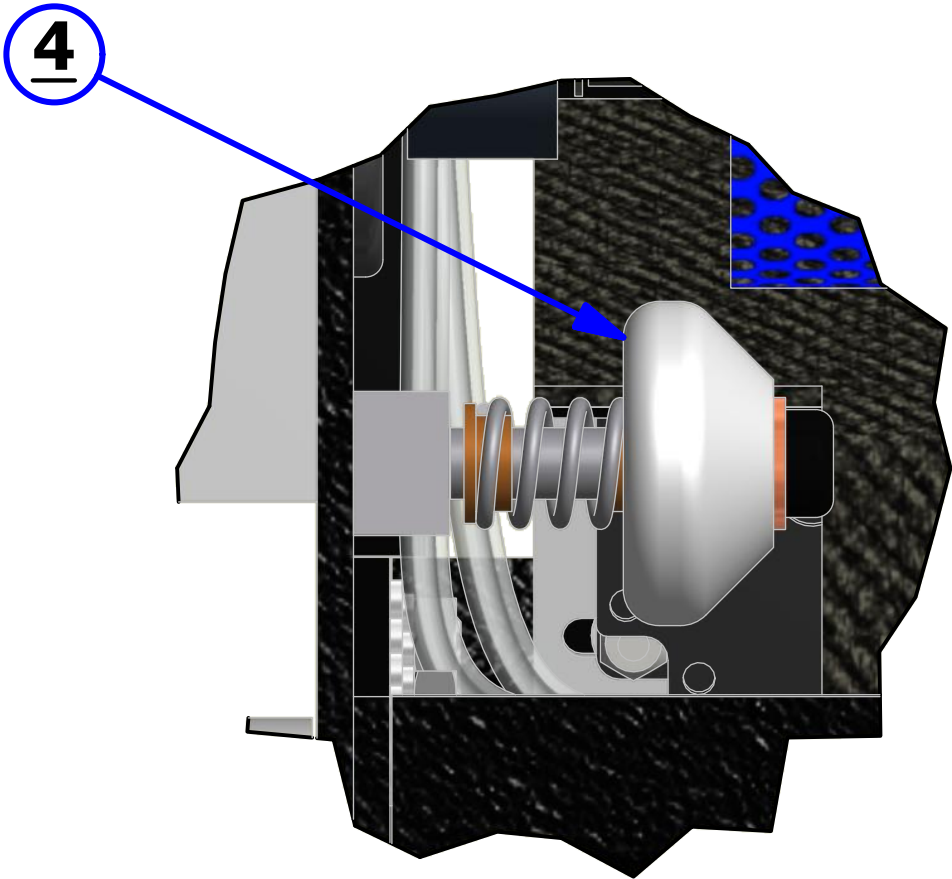
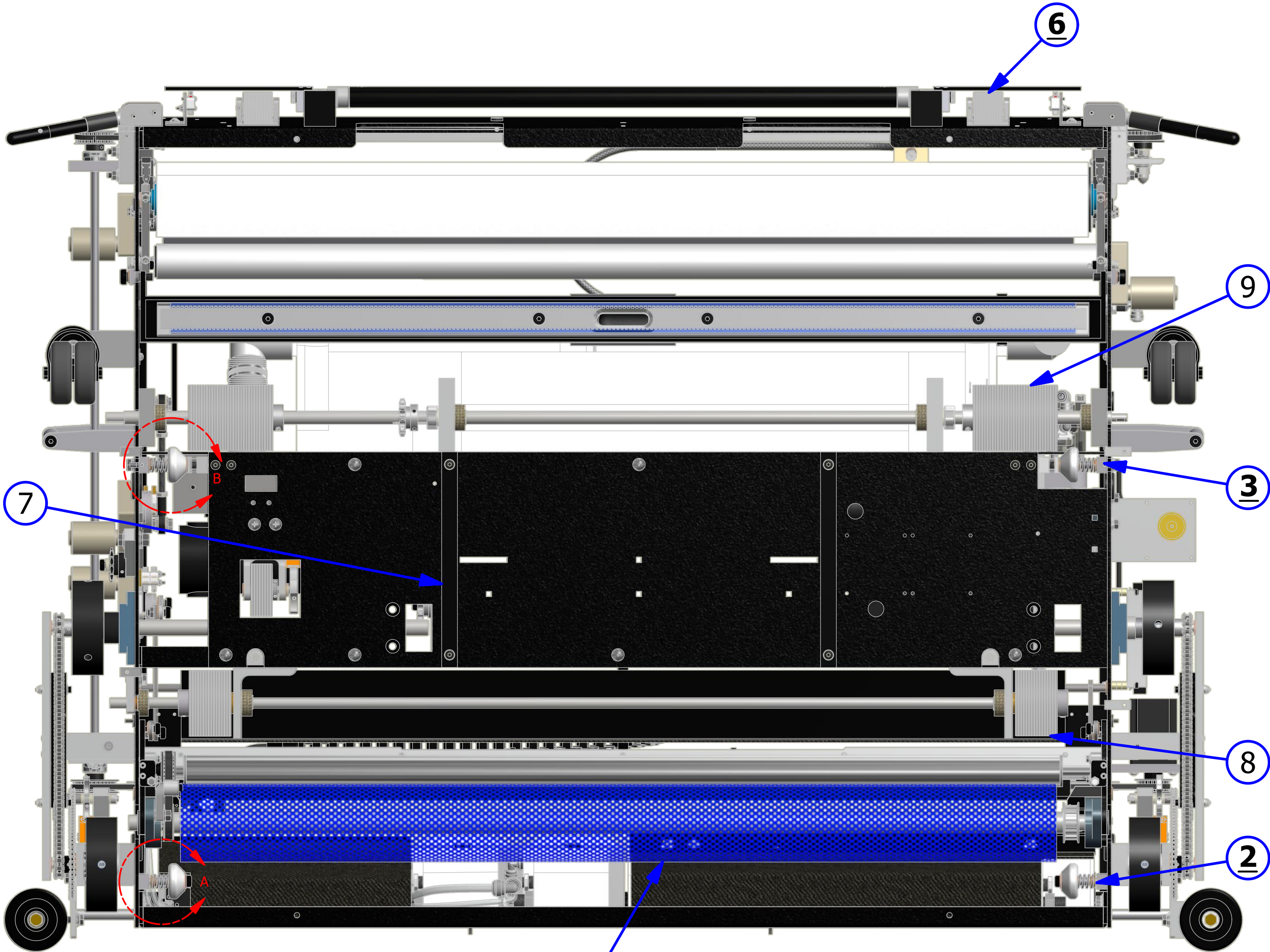
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	158-8414	BUFFER MOTOR - 24VDC - 500RPM - STANDARD	EA
	1	158-1406B	BUFFER MOTOR BRUSHES (PAIR)	PR
	1	164-9016	BUFFER BELT	EA
	1	158-9401	PULLEY (14 TOOTH 1/2" BORE)	EA
1	1	164-8014	BUFFER MOTOR - 24VDC - 700RPM - VARIABLE BUFFER	EA
	1	158-1405B	BUFFER MOTOR BRUSHES (PAIR)	PR
	1	164-9017	BUFFER MOTOR BELT	EA
	1	164-9014A	BUFFER MOTOR PULLEY ASSEMBLY	EA
2	1	164-8217M	RIGHT MAIN DRIVE MOTOR 24V	EA
2	1	158-8602	LEFT DRIVE MOTOR 24V	EA
	1	158-1405B	DRIVE MOTOR BRUSHES (PAIR)	PR
	1	154-9601	CHAIN (FOR 153-9002, INSIDE AND OUTSIDE SPROCKET)	EA
	1	153-9444	CHAIN (FOR 153-9003, MIDDLE SPROCKET)	EA
	1	153-9047	MASTER LINK #40	EA
	1	153-9048	OFFSET LINK #40	EA
	1	153-9002	SPROCKET - 40B13 (5/8 IN) INSIDE AND OUTSIDE SPROCKET	EA
	1	153-9003	SPROCKET - 40B10 (5/8 IN) INSIDE AND OUTSIDE SPROCKET	EA
3	1	158-8407	VACUUM MOTOR - 24VDC	EA
4	1	158-8404D	CLEANER PUMP ASSEMBLY	EA
	1	154-0861B	NORPRENE TUBING FOR CLEANER PUMP ASSEMBLY	EA
5	1	158-8404	CLEANER PUMP MOTOR - 24VDC	EA



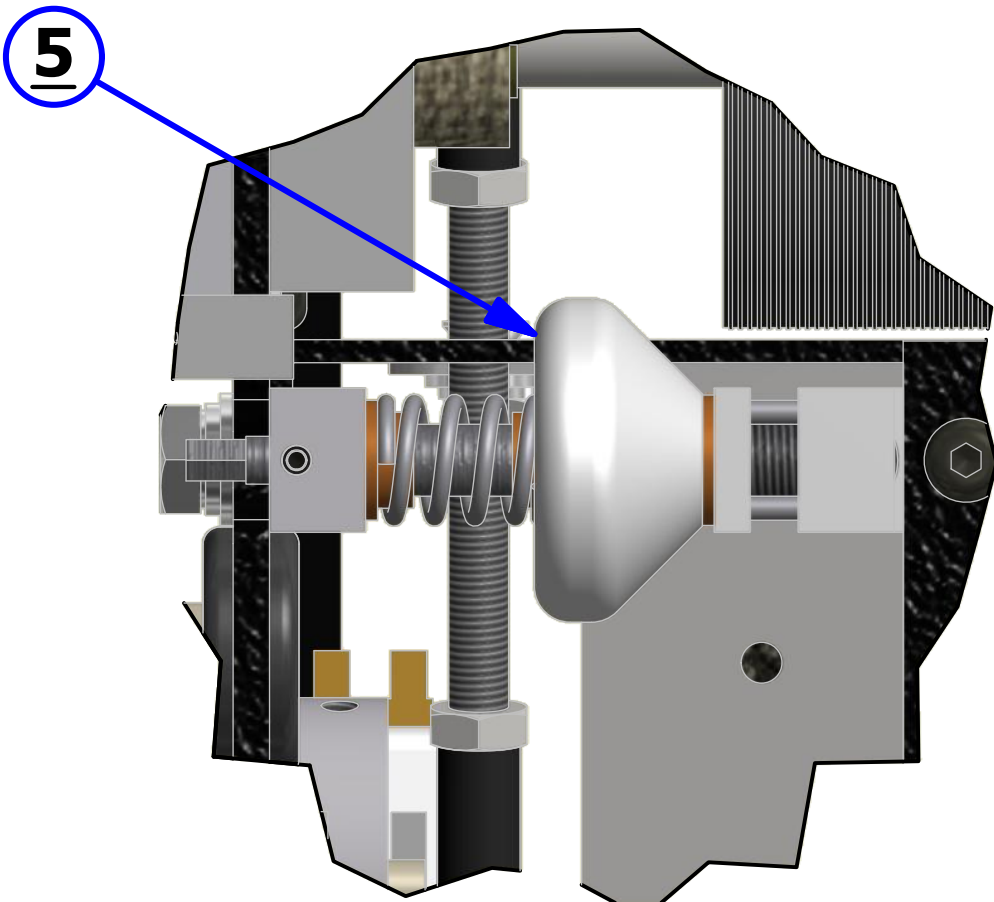
BOTTOM - FLEX WALKER

REV. 1/14

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8001	BUFFER BRUSH ASSEMBLY	EA
	1	164-9006	BUFFER BELT ASSY. NON-VARIABLE	EA
	1	154-9615	BUFFER BELT ASSEMBLY - VARIABLE BUFF	EA
2	2	158-8642	REAR GUIDE WHEEL ASSEMBLY - COMPLETE	EA
2.1	2	153-2407	SHOULDER BOLT 3/8 X 1 3/4	EA
2.2	2	153-2978	SPRING - COMPRESSION FOR GUIDE WHEEL	EA
2.3	2	158-8636	GUIDE WHEEL ASSEMBLY - REAR	EA
3	2	158-8643	FRONT GUIDE WHEEL ASSEMBLY - COMPLETE	EA
3.1	2	153-9803	FLANGED BUSHING - 3/8 X 1/2 X 3/4	EA
3.2	2	153-2978	SPRING - COMPRESSION FOR GUIDE WHEEL	EA
3.3	2	158-8637	GUIDE WHEEL ASSEMBLY - REAR	EA
4	2	158-8636	GUIDE WHEEL ASSEMBLY - REAR (WHEEL ONLY)	EA
5	2	158-8637	GUIDE WHEEL ASSEMBLY - FRONT (WHEEL ONLY)	EA
6	2	153-7005R	MOMENTARY WHEEL ASSEMBLY (WHEEL ONLY)	EA
	2	153-6006	MOMENTARY WHEEL SHAFT	EA
	2	153-6029	MOMENTARY WHEEL HOUSING ASSEMBLY	EA
7	2	153-9803	SKID GUIDE	EA
8	2	153-7002AA	LDS/DRIVE WHEEL	EA
9	2	153-7013	DRIVE WHEEL	EA



DETAIL A

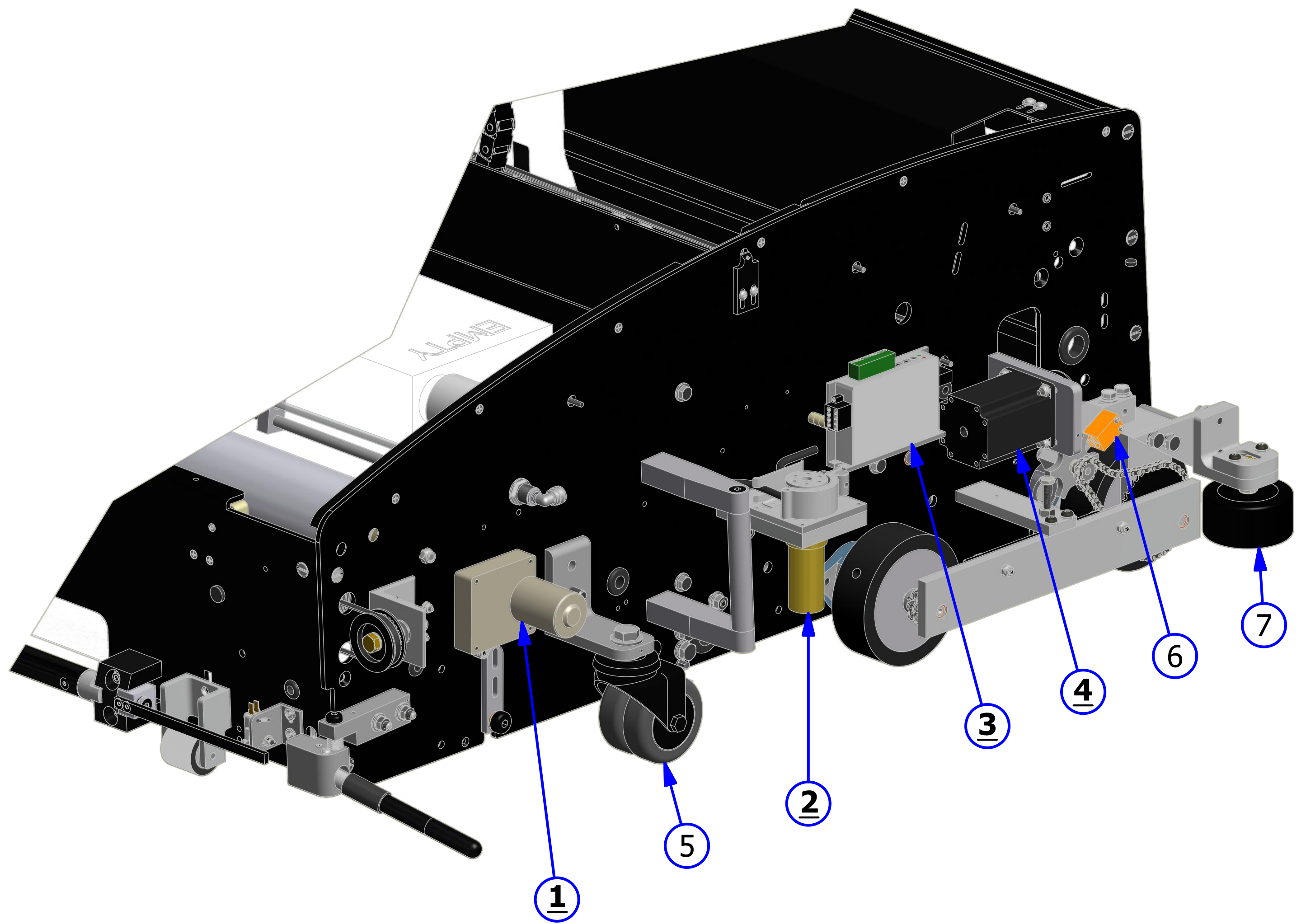


DETAIL B

LEFT SIDE - FLEX WALKER

REV. 1/14

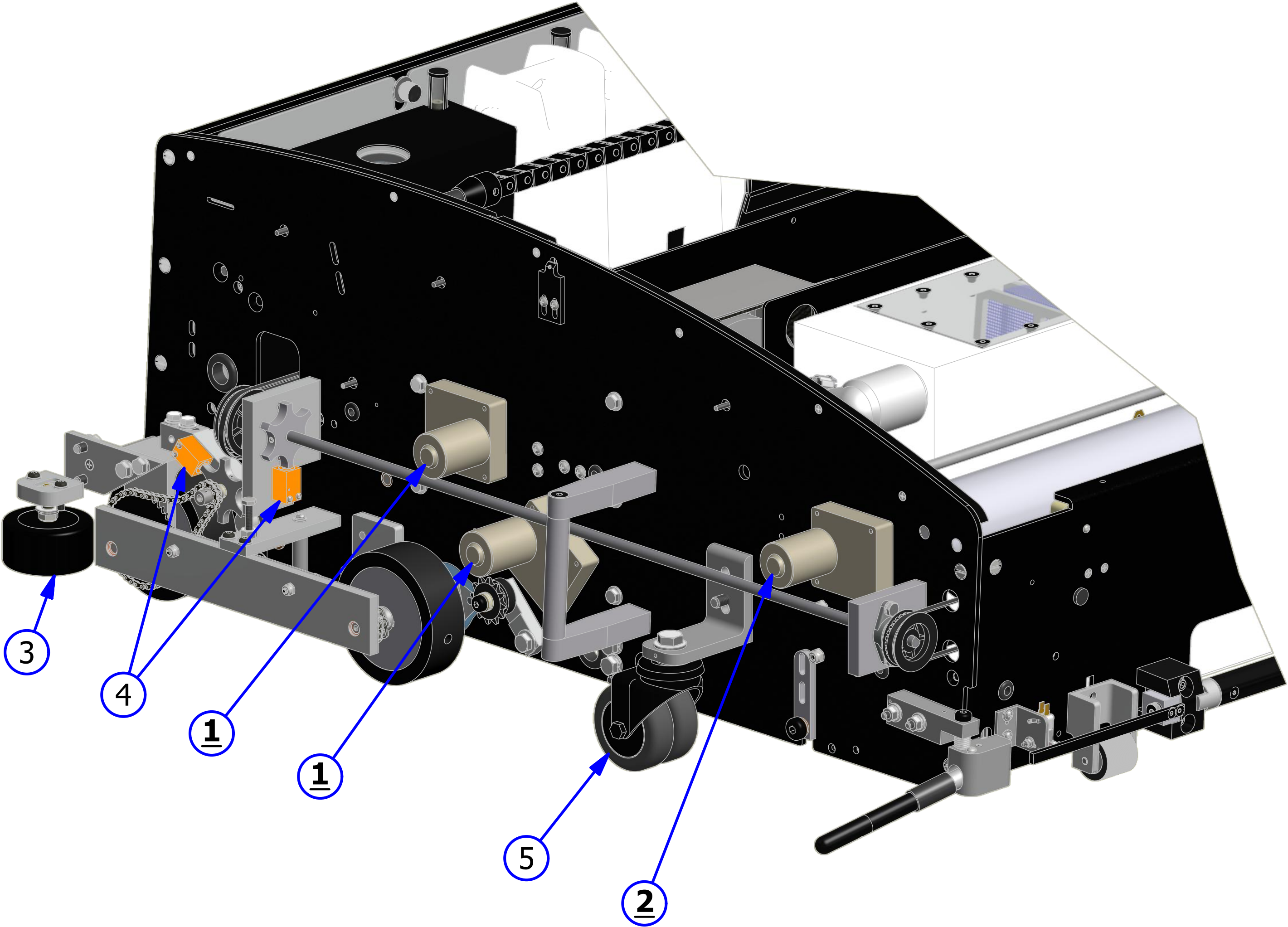
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	158-8403	ASSEMBLY - DUSTER MOTOR 24VDC	EA
2	1	164-8027	CLEANER PUMP ASSEMBLY - CONCENTRATE (UPGRADE ONLY)	EA
		164-8025	CLEANER TUBING #14 FOR SUPER CONCENTRATE	EA
		164-8026	CLEANER TUBING #16 FOR REG CONCENTRATE	EA
3	1	158-1605	SPEED CONTROL - BERG	EA
4	1	164-8032	HEAD DRIVE MOTOR ASSEMBLY	EA
5	6	153-0001BK	CASTER ASSEMBLY (3 INCH DUAL WHEEL)- BLACK	EA
6	1	154-1220	PROXIMITY SENSOR	EA
7	2	153-7203	BUMPER	EA



RIGHT SIDE - FLEX WALKER

REV. 1/14

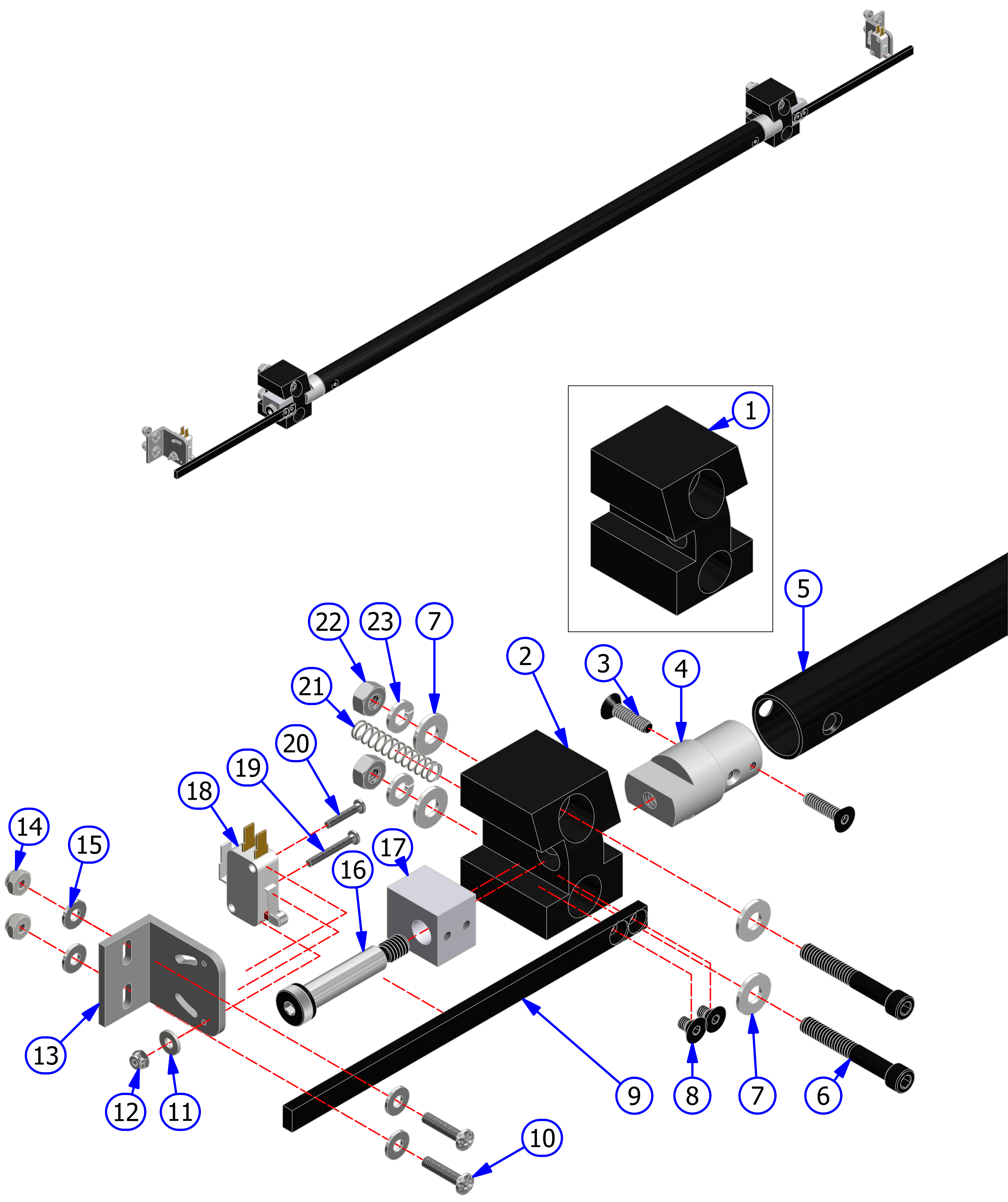
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	158-8402	SQUEEGEE/BRUSH LIFT MOTOR - 24VDC	EA
2	1	158-8403	DUSTER MOTOR ASSEMBLY - 24VDC	EA
3	1	153-7203	BUMPER WHEEL	EA
4	2	154-1220	PROXIMITY SENSOR	EA
5	6	153-0001BK	CASTER ASSEMBLY (3 INCH DUAL WHEEL)- BLACK	EA



FRONT HANDLE ASSEMBLY - FLEX WALKER

REV. 1/14

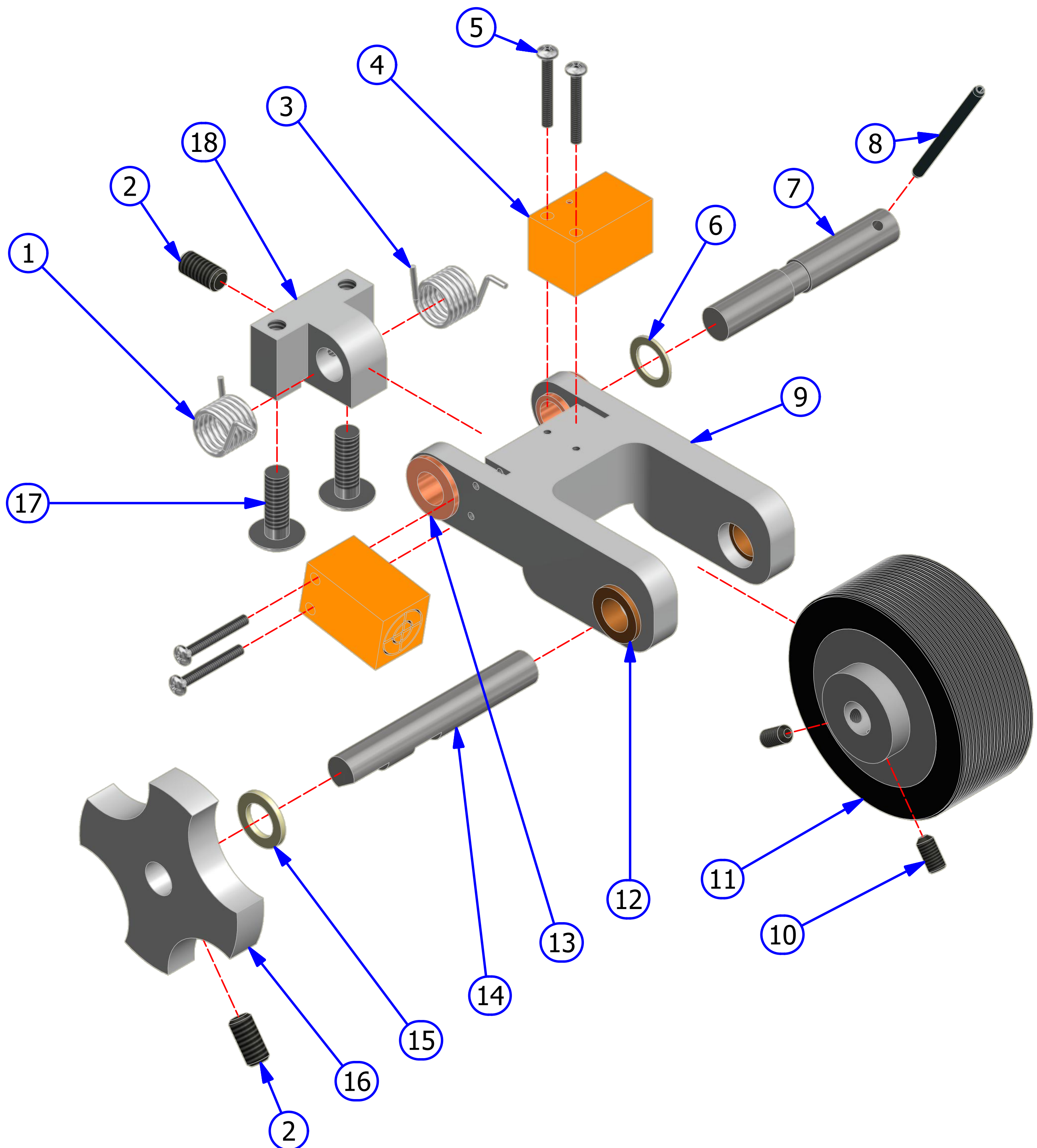
<u>INDEX</u>				
<u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-6069	FLEX FRONT HANDLE BLOCK (LT)	EA
2	1	164-6068	FLEX FRONT HANDLE BLOCK (RT)	EA
3	4	153-2996	SCREW - FHCS 10-24 X 3/4 BLACK OXIDE	EA
4	2	164-6072	FRONT HANDLE PLUG	EA
5	1	164-6073	FRONT HANDLE	EA
6	4	164-2009	SHCS-1/4-20	EA
7	8	153-2004	1/4 FLATWASHER	EA
8	4	164-2017	FHSCS-10-32 X 5/16	EA
9	2	164-6071	BUMPER ARM	EA
10	4	153-2087	MS PHILLIPS - 8-32 X 3/4	EA
11	2	153-2001	#6 FLATWASHER	EA
12	2	153-2231	LOCKNUT - 4-40	EA
13	2	164-6032	FLEX BUMPER SWITCH BRACKET	EA
14	4	153-2019	LOCKNUT - 8-32 (NYLOK)	EA
15	8	153-2002	#8 FLATWASHER	EA
16	2	164-2008	SHOULDER BOLT 3/8 X 1-1/2 5/16-18	EA
17	2	164-6070	BUMPER BAR BLOCK	EA
18	2	153-1203	MICROSWITCH W/ROLLER	EA
19	2	153-2216A	MS PHILLIPS - 4-40 X 7/8	EA
20	2	153-2216	MS PHILLIPS - 4-40 X 5/8	EA
21	2	164-2010	SPRING-0.300 OD X 1.50	EA
22	4	153-2023	1/4-20 HEX NUT	EA
23	4	153-2014	1/4 LOCKWASHER	EA



LDS ASSEMBLY - FLEX WALKER

REV. 1/14

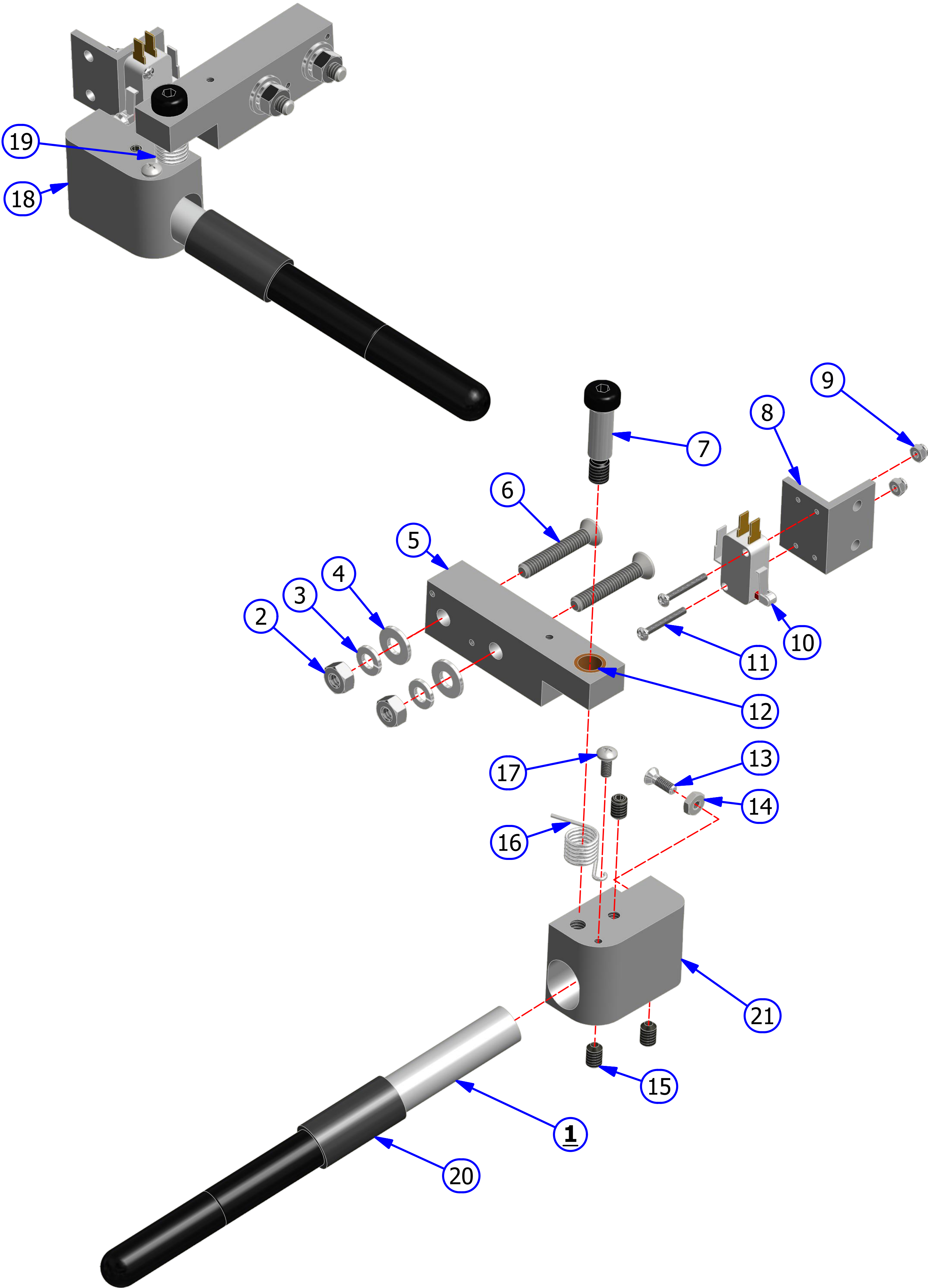
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	153-2944	TORSION SPRING - RH	EA
2	2	153-2051	SET SCREW - 1/4-20 X 1/2	EA
3	1	153-2945	TORSION SPRING - LH	EA
4	2	154-1220	INDUCTIVE PROXIMITY SENSOR	EA
5	4	153-2216A	MS PHILLIPS - 4-40 X 7/8	EA
6	1	153-2531	NYLON FLAT WASHER - 3/8 (0.030)	EA
7	1	164-6129	LDS ARM SHAFT	EA
8	1	153-2037	ROLL PIN - 1/8 X 1-3/4	EA
9	1	164-6127	LDS ARM	EA
10	2	153-2201	SET SCREW - 10-32 X 3/8	EA
11	1	164-7001	LDS COUNTER WHEEL	EA
12	2	153-9803	FLANGED BUSHING (3/8 X 1/2 X 1/4)	EA
13	2	154-9617	FLANGED BUSHING (3/8 x 1/2 x 3/8)	EA
14	1	164-6130	LDS WHEEL SHAFT	EA
15	1	153-2009	NYLON FLAT WASHER (3/8 - 0.060)	EA
16	1	164-6131	LDS DISK - FLEX	EA
17	2	153-2924	MS PHILLIPS - 1/4-20 X 3/4 TRUSS HEAD	EA
18	1	164-6128	LDS ARM MOUNT	EA



WHISKER ASSEMBLY

REV. 4/14

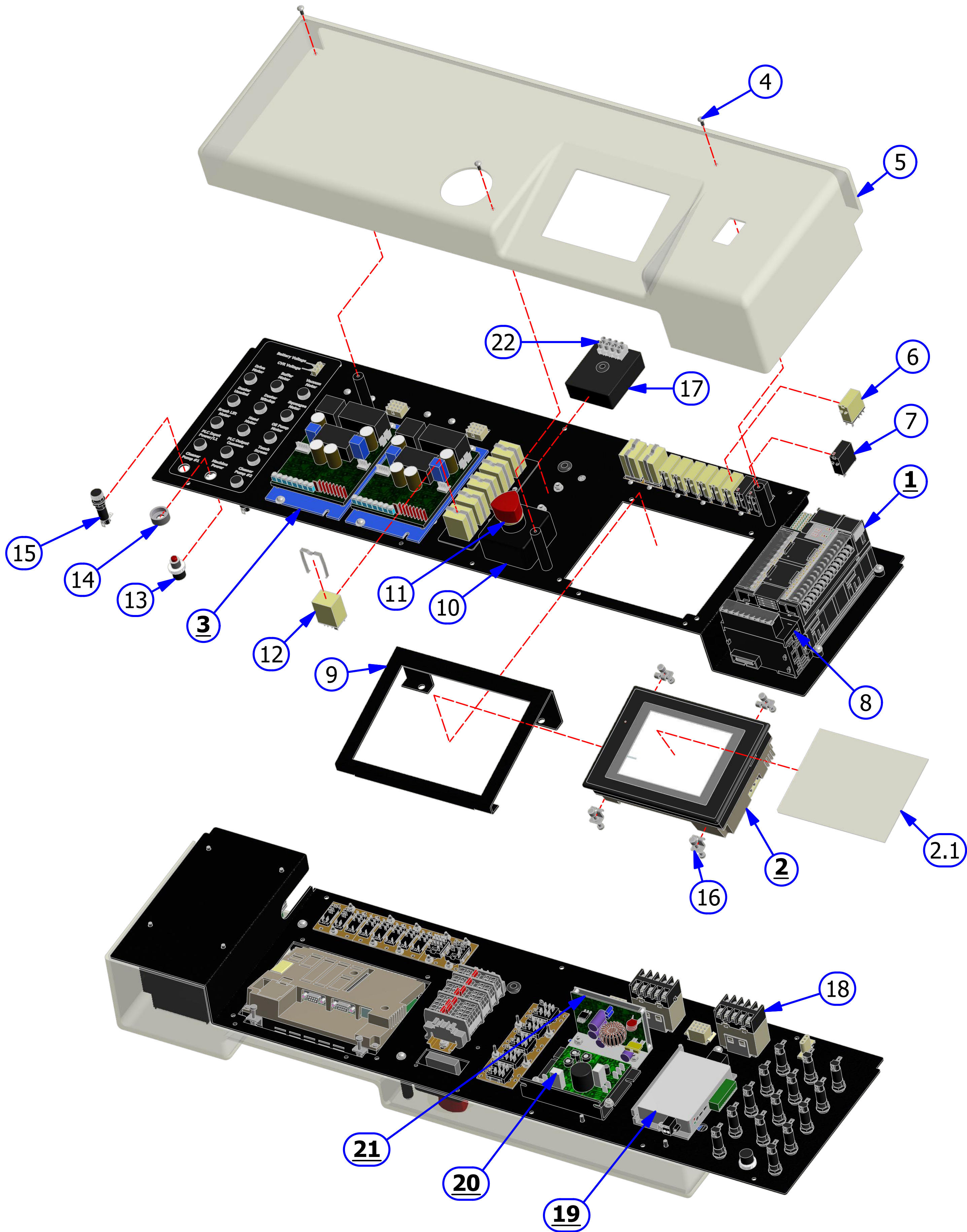
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8660	FLEX WHISKER TUBE ASSEMBLY	EA
2	4	153-2023	1/4-20 HEX NUT	EA
3	4	153-2014	1/4 LOCKWASHER	EA
4	4	153-2004	1/4 FLATWASHER	EA
5	2	158-8611	WHISKER BEARING BLOCK ASSEMBLY WITH BUSHING	EA
6	4	153-2227A	FHMS - 1/4-20 X 1-1/2	EA
7	2	153-2739	SHOULDER BOLT 3/8 IN DIA 1" LONG	EA
8	2	158-6641	WHISKER SWITCH MOUNT PLATE	EA
9	4	153-2231	LOCKNUT - 4-40	EA
10	2	153-1203	MICROSWITCH W/ROLLER	EA
11	4	153-2216A	MS PHILLIPS - 4-40 X 7/8	EA
12	2	154-9212	BUSHING ONLY	EA
13	2	153-2817	FLAT HEAD PHILLIPS - 8-32 X 1/2	EA
14	2	153-2414	HEX NUT - 8-32	EA
15	6	153-2051B	SET SCREW - 1/4-20 X 3/8	EA
16	1	153-2944	TORSION SPRING - RIGHT	EA
17	2	153-2086A	MS PHILLIPS - 8-32 X 3/8	EA
18	1	164-6054	FLEX WHISKER BASE - LEFT	EA
19	1	153-2945	TORSION SPRING - LEFT	EA
20	1	153-2941	RUBBER SLEEVE (1 SET LT AND RT)	EA
21	1	164-6055	FLEX WHISKER BASE - RIGHT	EA



PLC PLATE ASSEMBLY

REV. 3/15

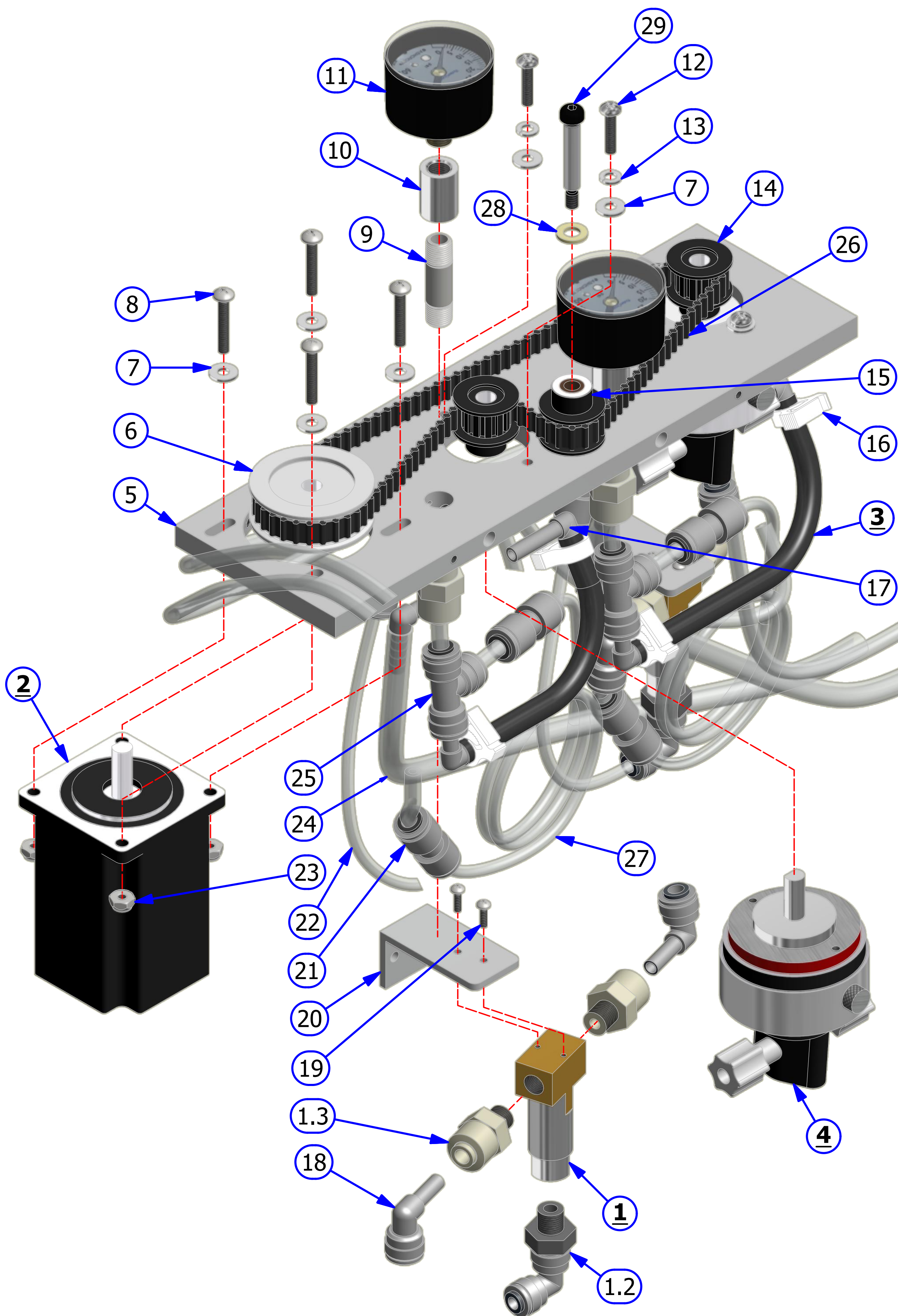
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	158-1610P	PLC FOR FLEX - SPECIFY SOFTWARE VERSION	EA
1.1	1	158-1610S	SERIAL CONVERTER FOR FLEX	EA
1.2	1	158-1610D	CABLE TO TOUCHSCREEN - 24IN (NOT SHOWN)	EA
2	1	164-8011	TOUCH SCREEN ASSEMBLY	EA
2.1	1	158-1612	SCREEN PROTECTOR	EA
3	1	164-8010	SPEED CONTROL ASSEMBLY BUFFER/DRIVE	EA
4	7	153-2086A	MS PHILLIPS - 8-32 X 3/8	EA
5	1	164-6062	CLEAR PC PLATE COVER	EA
6	6	158-1458	RELAY - OMRON 24DC DPDT GENERAL PURPOSE	EA
6.1	6	164-1204	RELAY BASE FOR RELAY 158-1458	EA
7	2	158-1460	RELAY SOLID STATE	EA
7.1	2	164-1206	RELAY BASE FOR RELAY 154-1460	EA
8	1	164-1217	ANALOG OUTPUT (Buffer and/or Cleaner Upgrade only)	EA
9	1	164-6730	TOUCH SCREEN MOUNT	EA
10	1	164-6161	E-STOP BOX	EA
11	1	164-1221	E-STOP SWITCH ASSEMBLY	EA
12	6	158-1462	24 V RELAY DPDT 10A W/DIODE	EA
12.1	6	164-1203	RELAY BASE FOR RELAY 158-1462	EA
13	1	153-1408	PUSH BUTTON (RED = NORMALLY OPEN)	EA
14	1	153-1209	BUTTON GUARD	EA
15	14	153-1028	PANEL-MOUNT FUSE HOLDER - UL (COMPLETE)	EA
16	4	158-1610TC	TOUCH SCREEN MOUNT CLIP	EA
17	1	158-6666	RESISTANCE ADJUSTMENT BOX - MODIFIED	EA
18	2	158-1465	CONTACTOR 24VDC	EA
19	1	158-1605	STEPPER SPEED CONTROL BOARD	EA
20	1	158-8415	SPEED CONTROL BOARD - CLEANER	EA
21	1	164-8028	CVR ASSEMBLY - VARIABLE BUFF ONLY	EA
21.1	1	158-1433A	CVR ASSEMBLY ALL	EA
22	1	158-1611	MOLEX TERMINAL BLOCK	EA
22.1	1	158-8619W	RESISTANCE WIRE ASSY - 22AWG	EA



OIL VALVE ASSEMBLY

REV. 1/14

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	154-8298	OIL CONTROL VALVE (24VDC) WITH EXTENDED WIRES	EA
1.1	2	154-1209	VALVE-24V DC 3-WAY (1/8" NPT)	EA
1.2	2	154-0613	ELBOW - 1/8 NPT X 3/16 TUBE	EA
1.3	4	154-0224	MALE CONNECTOR - 1/4" TUBE X 1/8 NPT	EA
2	1	158-8632	OIL STEPPER MOTOR ASSEMBLY	EA
3	2	164-8021	FLEX PULSE SUPPRESSION TUBE	EA
4	2	154-1214	FLUID METERING PUMP-0.05 ML/STROKE	EA
5	1	164-6050	DUAL OIL PUMPS - MOTOR BRACKET	EA
6	1	158-9403	PULLEY - 26XL037 X 5/16" BORE	EA
7	8	153-2002	#8 FLATWASHER	EA
8	4	153-2089	MS PHILLIPS - 8-32 X 1	EA
9	2	164-0207	PIPE NIPPLE - THREADED BLK - 1/8 X 1 1/2	EA
10	2	154-0230	IN-LINE COUPLER (1/8 NPT) FLOAT	EA
11	2	158-1613	PRESSURE GAUGE - 60PSI	EA
12	4	153-2087	MS PHILLIPS - 8-32 X 3/4	EA
13	4	153-2013	#10 LOCKWASHER	EA
14	2	154-9208	PULLEY - 12XL - 5/16" BORE W/SET SCREW	EA
15	1	164-8029	OIL PUMP IDLER ASSEMBLY	EA
16	4	164-2046	HOSE CLAMP	EA
17	6	154-0226	ELBOW - TUBE TO HOSE BARB (1/4 X 1/4 ID)	EA
18	4	154-0222	ELBOW - 1/4" STEM X 1/4" TUBING OD	EA
19	4	153-2504	MS PHILLIPS - 4-40 X 3/8	EA
20	2	164-6110	VALVE ANGLE	EA
21	6	154-0248	REDUCING UNION CONNECTOR-1/4" X 3/16"	EA
22	1	154-0202A	PENCIL TUBING STOCK 1/4OD X 1/8ID	IN
23	4	153-2019	LOCKNUT - 8-32 (NYLOK)	EA
24	1	154-0202	PENCIL TUBING STOCK 3/8OD X 1/4ID	IN
25	2	153-0815	UNION TEE (1/4 X 1/4 X 1/4 - QUICK DISC)	EA
26	1	164-9008	TIMING BELT DOUBLE SIDED (220XL038	EA
27	1	154-0202B	PENCIL TUBING STOCK - 3/16 OD X 1/16 ID	IN
28	1	153-2510	NYLON WASHER - 1/4	EA
29	1	153-2803	SHOULDER BOLT - 1/4 X 1-1/4 (10-24)	EA



SUB TANK CARTRIDGE ASSEMBLY

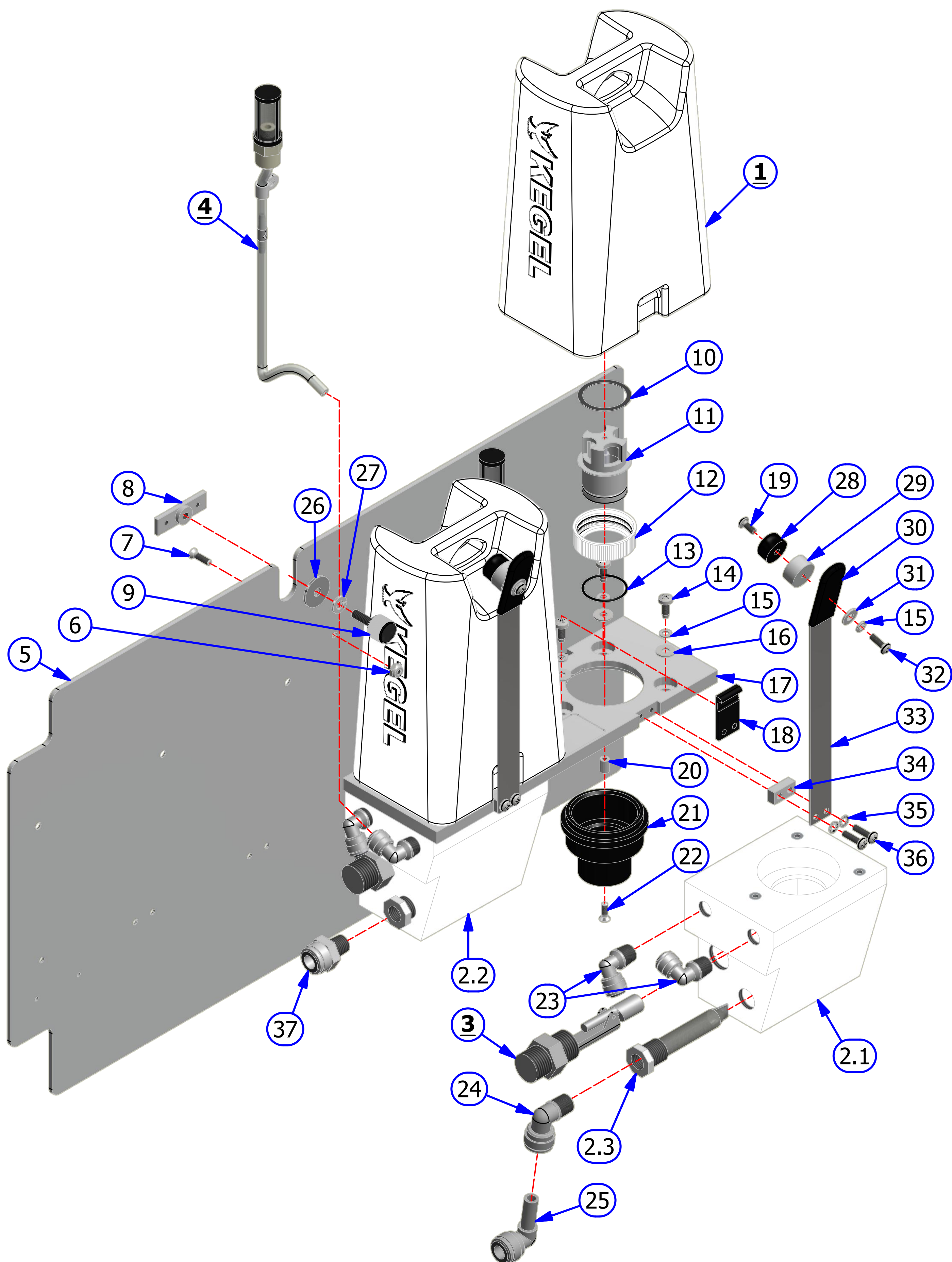
REV. 7/14

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	164-8015	FLEX 1.5L CARTRIDGE	EA
	1	164-8015A	CARTRIDGE ONLY (NO PLUNGER ASSEMBLY)	EA
2.1	1	164-6015A	FLEX CONDITIONER SUB TANK A	EA
2.2	1	164-6015B	FLEX CONDITIONER SUB TANK B	EA
2.3	1	154-0212	CONDITIONER TANK FILTER ASSEMBLY	EA
3	2	154-8693	FLOAT SWITCH ASSEMBLY	EA
4	2	164-8007	OIL VENT VALVE ASSEMBLY	EA
5	1	164-6124	OIL PLATE ASSEMBLY	EA
6	2	153-2019	LOCKNUT - 8-32 (NYLOK)	EA
7	2	153-2806	FLAT HEAD PHILLIPS - 8-32 X 5/8	EA
8	1	164-6122	OIL PLATE MOUNT	EA
9	1	164-2016	THUMB SCREW - KNURLED HEAD	EA
10	2	164-0002	VALVE GASKET	EA
11*	2	164-6076	CARTRIDGE VALVE ASSY (sold with complete cartridge)	
12	2	164-0004	FLEX CARTRIDGE CAP 38MM W/ HOLE	EA
13	2	164-6079	1.125 O-RING	EA
14	6	153-2605	MS PHILLIPS - 10-32 X 1/2 (SELF-TAP)	EA
15	6	153-2013	#10 LOCKWASHER	EA
16	6	153-2003	#10 FLATWASHER	EA
17	1	164-6113	CONDITIONER TANK MOUNT	EA
18	4	164-6153	CARTRIDGE RETAINER	EA
19	8	153-2086A	MS PHILLIPS - 8-32 X 3/8	EA
20	2	164-2044	STANDOFF FEMALE THREADED 8-32 X 3/8	EA
21	2	164-6086	SUB TANK PLUG	EA
22	2	153-2817	FLAT HEAD PHILLIPS - 8-32 X 1/2	EA
23	4	154-0223	ELBOW (90 DEGREE) - 1/4 NPT X 1/4" TUBE	EA
24	1	154-0225	ELBOW - 3/8 TUBE OD X 1/4 NPT	EA
25	1	154-0258	ELBOW - 3/8 STEM X 3/8 TUBE	EA
26	1	162-2013	FENDER WASHER 1/4 X 7/8	EA
27	1	153-2014	LOCK WASHER 1/4	EA
28	2	164-2052	RUBBER BUMPER	EA
29	2	164-6167	RUBBER BUMPER STANDOFF	EA
30	2	164-2053	RECTANGLE CAP	EA
31	2	153-2035	BLIND RIVET WASHER - 3/16	EA
32	2	153-2541	MS PHILLIPS - 8-32 X 1/2	EA
33	2	164-6169	SPRING STEEL	EA
34	2	164-6168	SPRING STEEL SPACER	EA
35	4	153-2533	INTERNAL TOOTH LOCK WASHER - #8	EA
36	6	153-2086	MS PHILLIPS - 8-32 X 5/8	EA
37	1	154-0814	FITTING - 1/4 NPT X 3/8 TUBE	EA



TECHNICAL

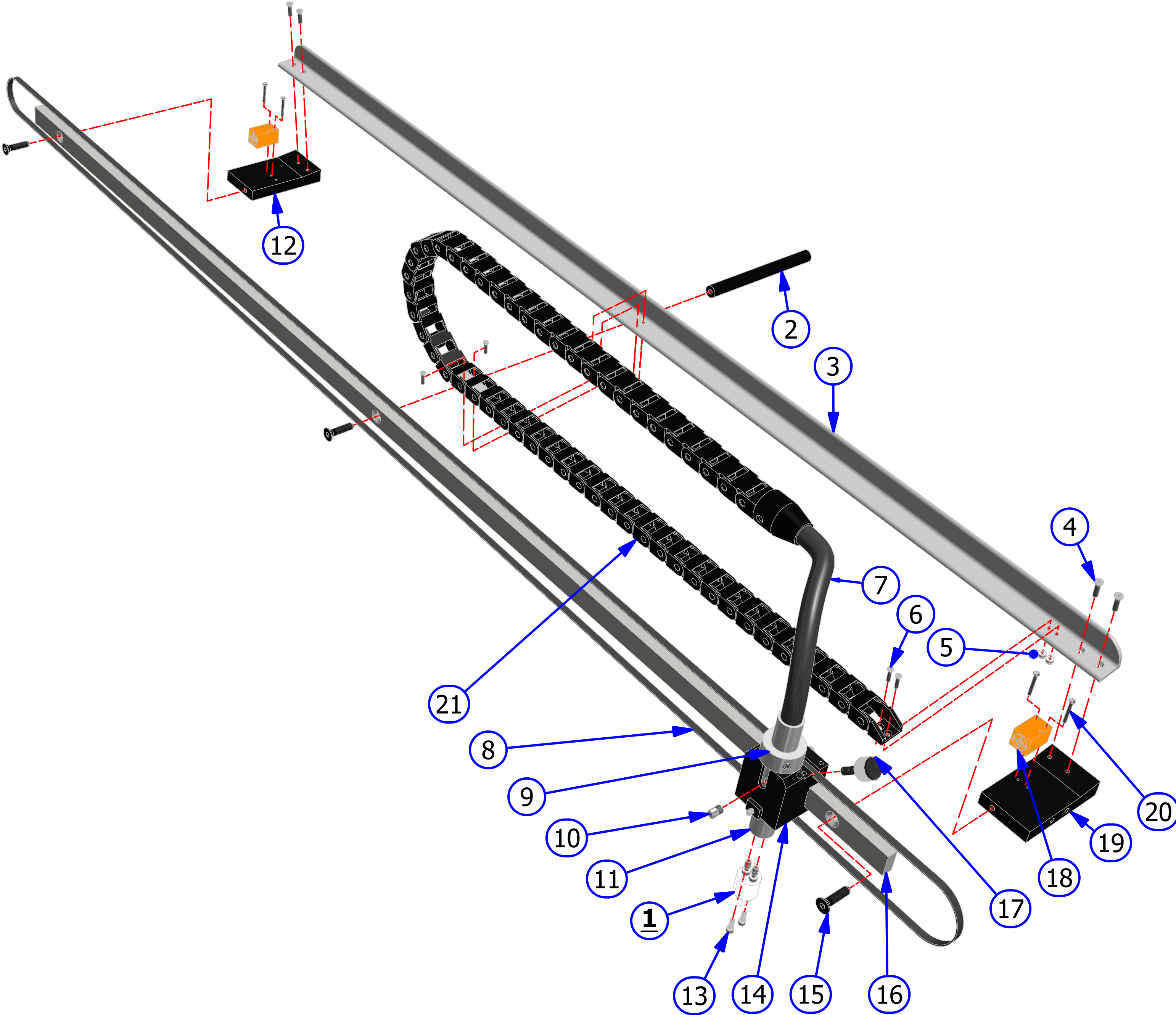
when ordering figure number 11, part number 164-6076, use part number 164-8015. The cartridge will come complete with the valve assembly.



OIL HEAD ASSEMBLY

REV. 1/14

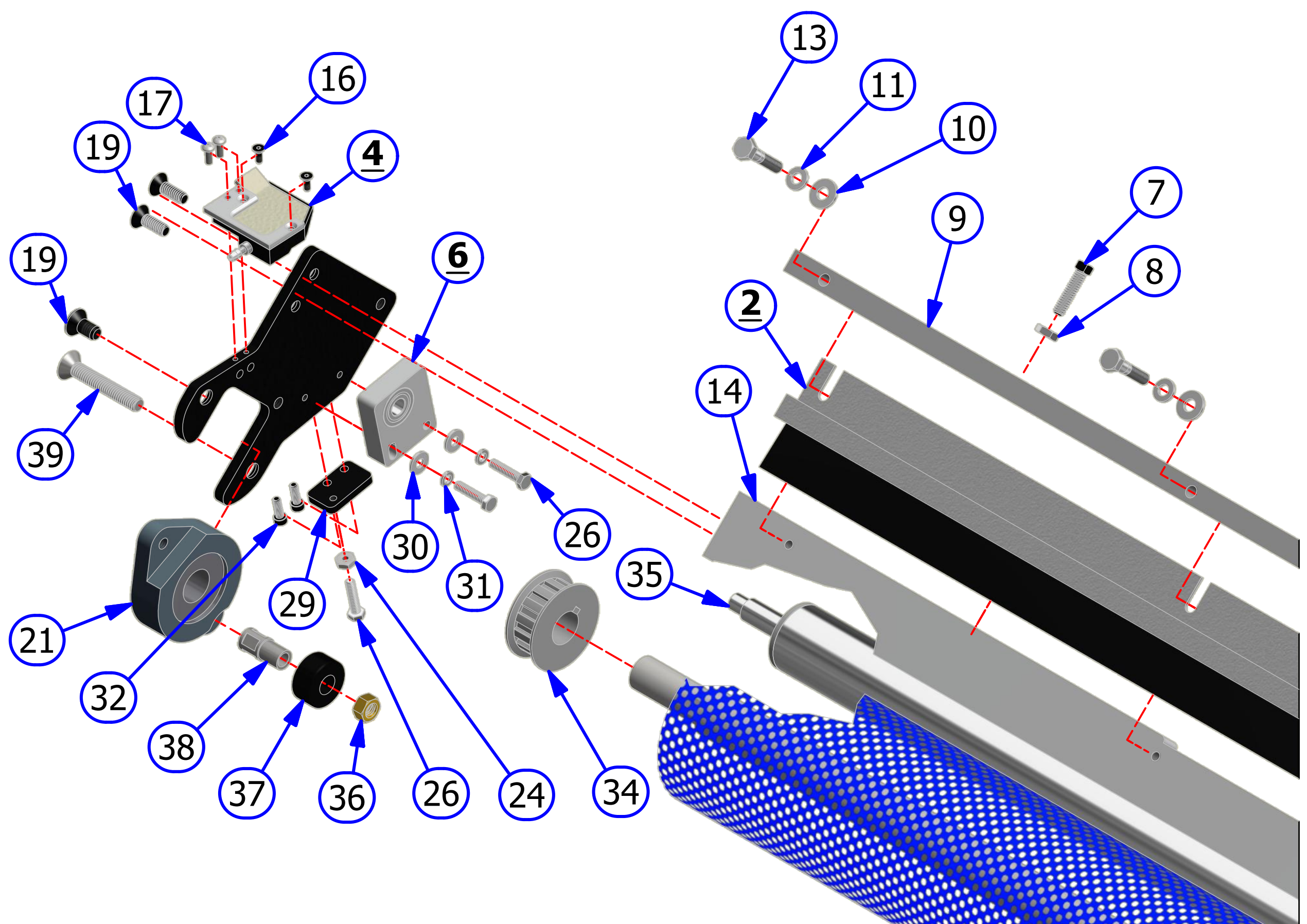
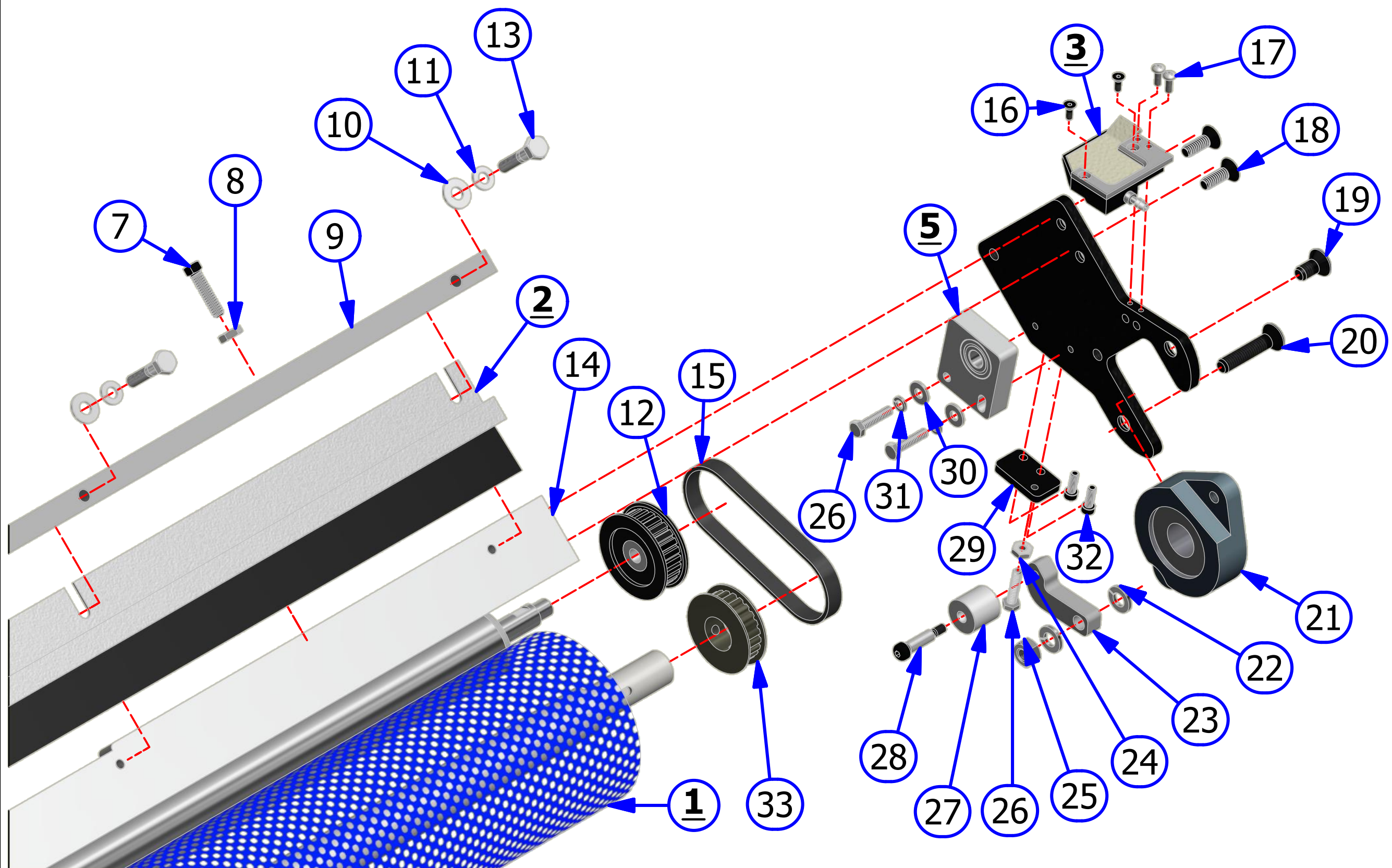
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8051	DUAL OIL TIP WITH FITTINGS	EA
2	1	164-6046	FLEX HEAD BAR SUPPORT	EA
3	1	164-6104	OIL TIP HOSE ANGLE	EA
4	5	153-2806	FLAT HEAD PHILLIPS - 8-32 X 5/8	EA
5	4	153-2231	LOCKNUT - 4-40	EA
6	4	153-2724	FHMS PHILLIPS - 4-40 X 1/2	EA
7	1	164-2015A	SPRING FOR OIL HEAD (OBSOLETE) - USE 164-8023	
7.1	1	164-8023	OIL TUBE SLEEVE - REPLACES 164-2015A	EA
8	1	154-9201	BELT FOR HEAD DRIVE	EA
9	1	153-2937	SHAFT COLLAR 3/4" ID	EA
10	1	153-2972	THREADED PIN 1/4-20 FOR TIP AND HOSE ASSY	EA
11	1	164-6156	OIL TIP TUBE	EA
12	1	164-6102	LEFT HEAD BAR MOUNT	EA
13	2	153-2987	SCREW 6-32 X 3/8 SHCS	EA
14	1	164-6111	FLEX OIL HEAD ASSY	EA
15	3	153-2702	FHMS - 1/4-20 X 1 SELF-LOCKING	EA
16	1	154-6647A	SLIDING HEAD BAR (3/8) - STANDARD	EA
17	1	164-2016	THUMB SCREW - KNURLED HEAD	EA
18	2	154-1220	PROXIMITY SENSOR	EA
19	1	164-6103	RIGHT HEAD BAR MOUNT	EA
20	4	153-2216A	MS PHILLIPS - 4-40 X 7/8	EA
21	1	165-9009	FLEX-CABLE CARRIER	EA



OIL TRANSFER ASSEMBLY

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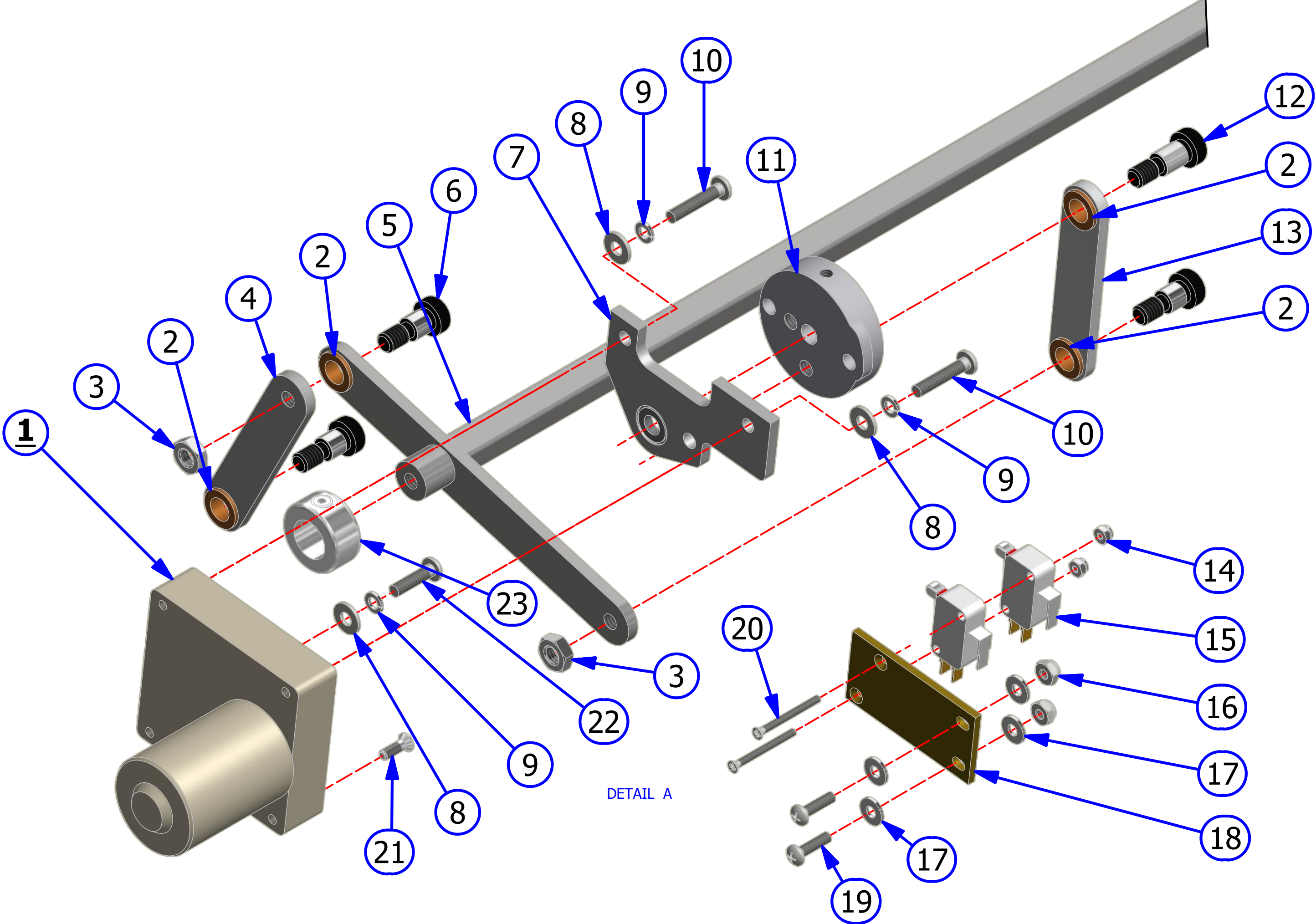
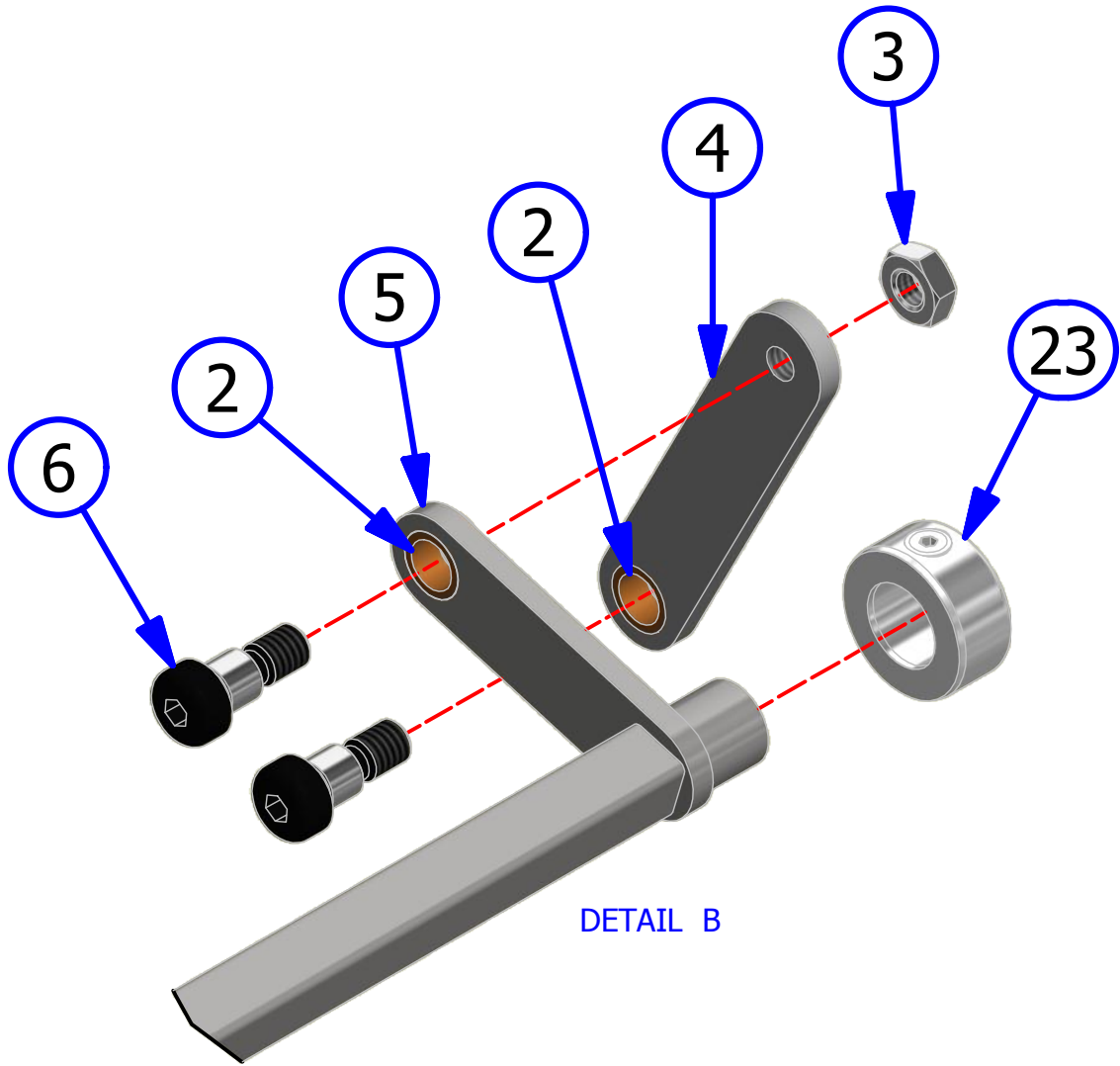
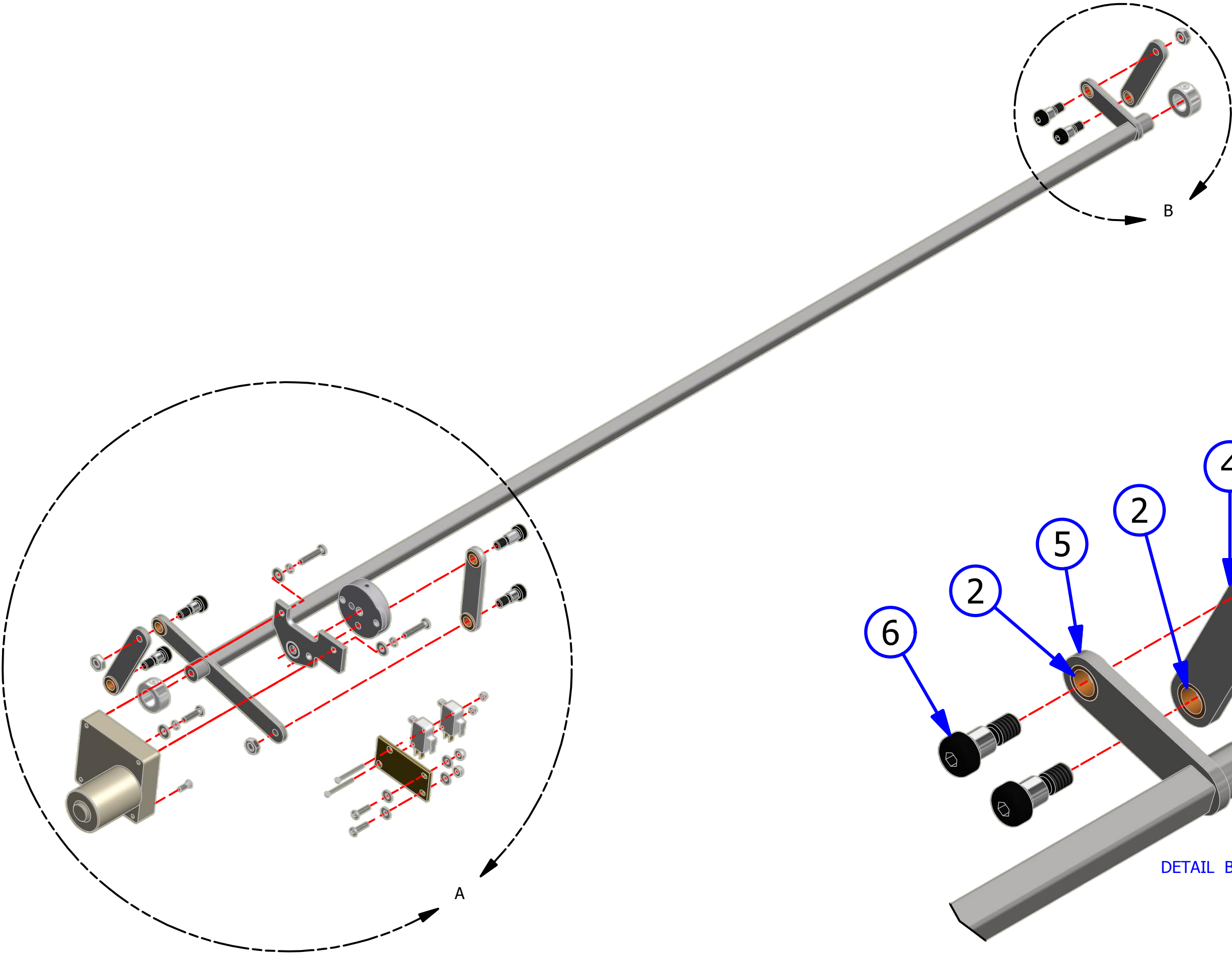
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8001	BUFFER BRUSH ASSEMBLY	EA
2	1	164-0866	SINGLE LONG BRUSH ASSEMBLY (TRANSFER BRUSH)	EA
3	1	164-8019	FLEX RIGHT DRIP PAD ASSEMBLY	EA
4	1	164-8018	FLEX LEFT DRIP PAD ASSEMBLY	EA
5	1	164-8045	BEARING MOUNT ASSEMBLY - RIGHT	EA
6	1	164-8046	BEARING MOUNT ASSEMBLY - LEFT	EA
7	4	153-2306	CUP POINT SQ HEAD SET SCREW 1/4-20 X 1	EA
8	4	153-2304	JAM NUT - 1/4-20	EA
9	1	158-6735	BRUSH TRACK MOUNT SUPPORT	EA
10	5	153-2004	1/4 FLATWASHER	EA
11	5	153-2014	1/4 LOCKWASHER	EA
12	1	154-9205D	PULLEY 24XL037 3/8 BORE	EA
13	5	153-2054	HHCS - 1/4-20 X 1-1/4	EA
14	1	158-6732	SINGLE BRUSH TRACK MOUNT	EA
15	1	154-9203	BELT FOR TRANSFER ROLLER	EA
16	4	153-2831	SCREW - 6/32 X 3/8 FHCS	EA
17	4	153-2721	MS PHILLIPS - 6-32 X 3/8	EA
18	4	153-2968	SCREW - 1/4-20 X 3/4 FHSCHS	EA
19	2	153-2802	FHSS - 5/16-18 X 5/8	EA
20	1	153-2513	FHSS - 5/16-18 X 1-1/2	EA
21	2	154-8640	FLANGED BEARING-STD BRUSH (3/4" ROTATED)	EA
22	2	153-2015	5/16 LOCKWASHER	EA
23	1	164-6051	TRANSFER ROLLER IDLER BELT BLOCK	EA
24	2	153-2022	HEX NUT - 10-24	EA
25	1	153-2024	HEX NUT - 5/16-18	EA
26	6	153-2955	10-24 x 7/8 HEX HEAD MACHINE SCREW	EA
27	1	158-6742	TRANSFER ROLLER BELT IDLER ROLLER	EA
28	1	153-2308	HEXAGON SOCKET HEAD SHOULDER SCREW	EA
29	2	164-6052	TRANSFER ROLLER ADJUSTMENT PLATE	EA
30	4	153-2035	BLIND RIVET WASHER - 3/16	EA
31	4	153-2013	#10 LOCKWASHER	EA
32	4	153-2999	SCREW - SHCS 8-32 X 1/2 BLACK OXIDE	EA
33	1	164-9007	PULLEY 24XLO37 3/4 BORE NO HUB NO KWT	EA
34	1	158-9402	PULLEY FOR BUFFER (FLX-17733 / FXW-13229 AND ABOVE)	EA
	1	164-9013	PULLEY FOR BUFFER (FLX-17732 / FXW-13228 AND BELOW)	EA
35	1	164-8008	TRANSFER ROLLER ASSEMBLY	EA
36	1	162-2032	LOCKNUT CENTERLOCK 5/16-18	EA
37	1	164-6165	BELT IDLER (FLX-17733 / FXW-13229 AND ABOVE & NON VB)	EA
	1	164-6165W	BELT IDLER (FLX-17732 / FXW-13228 AND BELOW & ALL VB)	EA
38	1	164-6166	BUFFER BELT IDLER SLEEVE	EA
39	1	164-2047	FHCS 5/16-18 X 2IN 18-8 SS	EA



BRUSH LIFT ROD ASSEMBLY

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<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	158-8402	MOTOR ASSEMBLY - 24VDC	EA
2	6	153-9803	FLANGED BUSHING (3/8 X 1/2 X 1/4)	EA
3	3	153-2027A	JAM NUT - 5/16-18	EA
4	2	164-6011	FLEX BRUSH LIFT ROD TO BEARING LINK	EA
5	1	164-6010	FLEX BRUSH LIFT ROD	EA
6	5	153-2801	SHOULDER BOLT-3/8 X 3/8 (5/16-18)	EA
7	1	158-8634	SQUEEGEE/BRUSH MOUNT PLATE ASSEMBLY	EA
8	3	153-2003	#10 FLATWASHER	EA
9	3	153-2013	#10 LOCKWASHER	EA
10	2	153-2092	MS PHILLIPS - 10-32 X 1	EA
11	1	154-6243	MOTOR CAM-DUAL LOBES (STACKED SWITCHES)	EA
12	1	153-2515	SHOULDER BOLT - 3/8 X 1/2 (5/16-18)	EA
13	1	164-6012	FLEX BRUSH LIFT ROD TO CAM LINK	EA
14	2	153-2231	LOCKNUT - 4-40	EA
15	2	153-1203	MICROSWITCH W/ROLLER	EA
16	2	153-2019	LOCKNUT - 8-32 (NYLOK)	EA
17	4	153-2002	#8 FLATWASHER	EA
18	1	154-6824	CAM SWITCH PLATE	EA
19	2	153-2086	MS PHILLIPS - 8-32 X 5/8	EA
20	2	153-2727	4-40 X 1-1/4 FHMS	EA
21	1	153-2817	FLAT HEAD PHILLIPS - 8-32 X 1/2	EA
22	1	153-2091	MS PHILLIPS - 10-32 X 3/4	EA



DETAIL A

CLEANER TANK ASSEMBLY

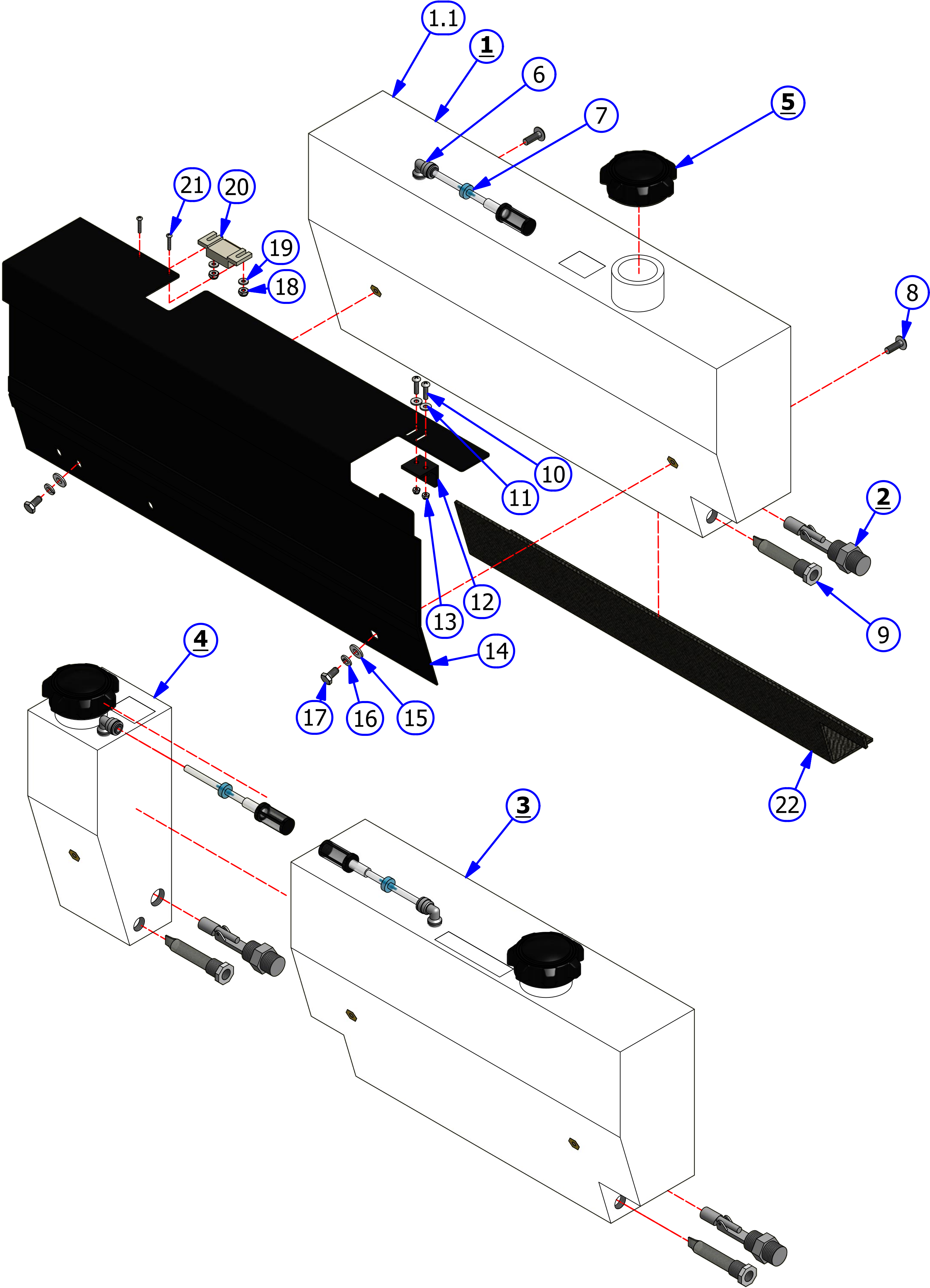
REV. 9/14

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8042	CLEANER SUPPLY TANK (COMPLETE)	EA
1.1	1	164-6016	CLEANER SUPPLY TANK ONLY	EA
2	1*	154-8693	CLEANER SUPPLY TANK FLOAT ASSEMBLY	EA
3	1	164-8041	FLEX UPGRADED WATER TANK ASSEMBLY (COMPLETE)	EA
3.1	1	164-6740	UPGRADED WATER TANK (TANK ONLY)	EA
4	1	164-8043	FLEX UPGRADED CLEANER TANK ASSEMBLY (COMPLETE)	EA
4.1	1	164-6741	UPGRADED CLEANER TANK (TANK ONLY)	EA
5	1*	164-8081	SUPPLY TANK CAP WITH GASKET	EA
5.1	1*	164-0021	GASKET FOR SUPPLY TANK CAP	EA
6	1	154-0223	ELBOW (90 DEGREE) 1/4NPT X 1/4IN TUBING	EA
7	1	154-8817	VENT VALVE ASSEMBLY	EA
8	2	153-2924	MS PHILLIPS - 1/4-20 X 3/4	EA
9	1*	154-0212B	FILTER ASSEMBLY FOR SUPPLY TANK	EA
10	2	153-2086	MS PHILLIPS - 8/32 X 5/8	EA
11	2	153-2002	FLAT WASHER #8	EA
12	1	154-6827M	MOUNTING ANGLE - MOLDED PLASTIC	EA
13	2	153-2231	LOCKNUT - 4-40	EA
14	1	164-8078	SPLASH GUARD (SPECIFY COLOR)	EA
15	2	153-2004	FLAT WASHER 1/4	EA
16	2	153-2014	LOCK WASHER 1/4	EA
17	2	153-2726	1/4-20 X 1/2 HHCS	EA
18	2	153-2019	LOCKNUT - 8-32 (NYLOK)	EA
19	2	153-2001	FLAT WASHER #6	EA
20	1	154-0609	MAGNETIC CATCH / PLATE ASSEMBLY	EA
21	2	153-2216	MS PHILLIPS 4-40 X 5/8	EA
22	1	154-0228S	STOCK - 1/8" GRAY FELT	IN



TECHNICAL NOTE

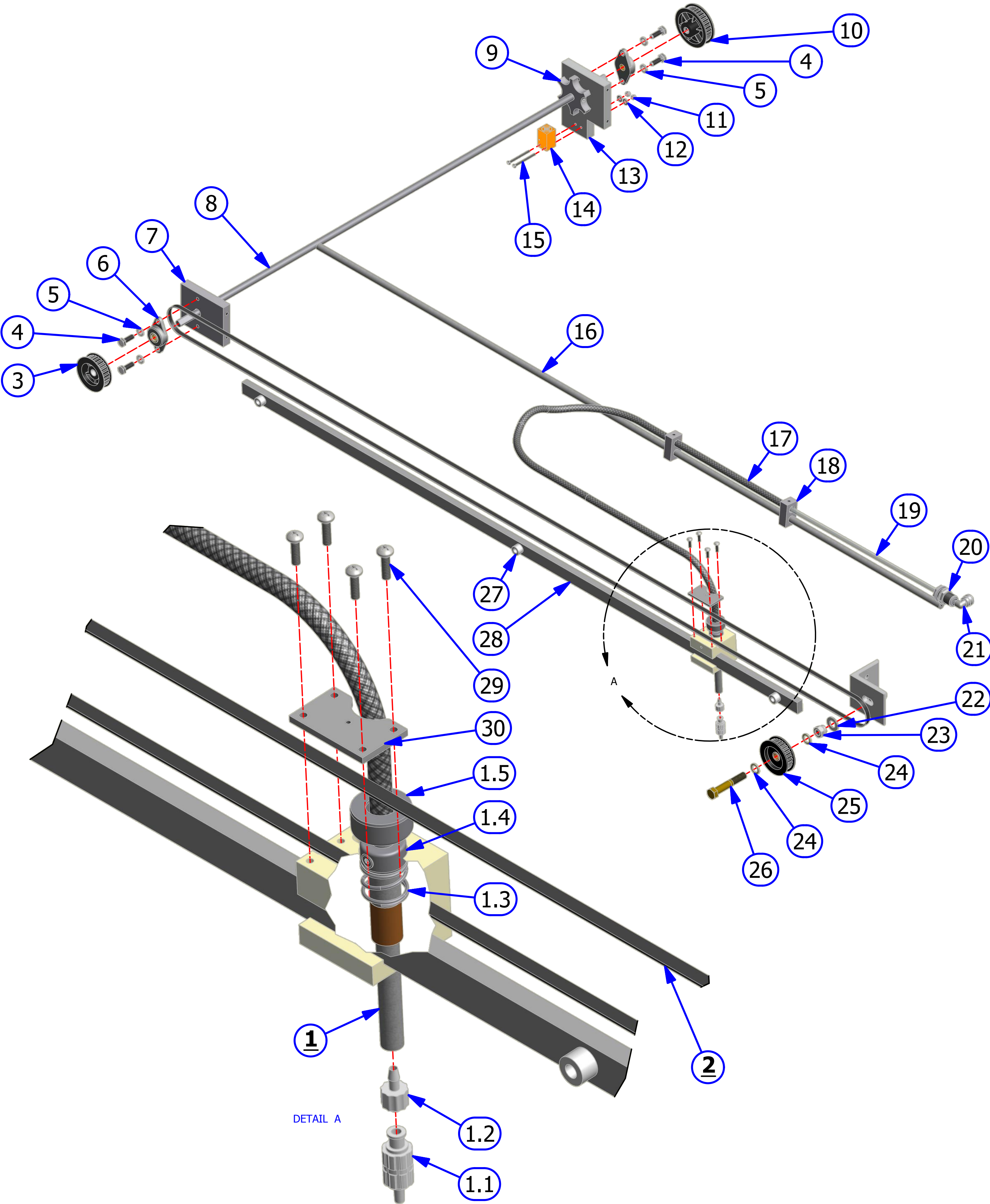
FOR MACHINES WITH THE UPGRADED CLEANING SYSTEM, THESE PARTS ARE QUANTITY OF TWO.



CLEANER HEAD ASSEMBLY

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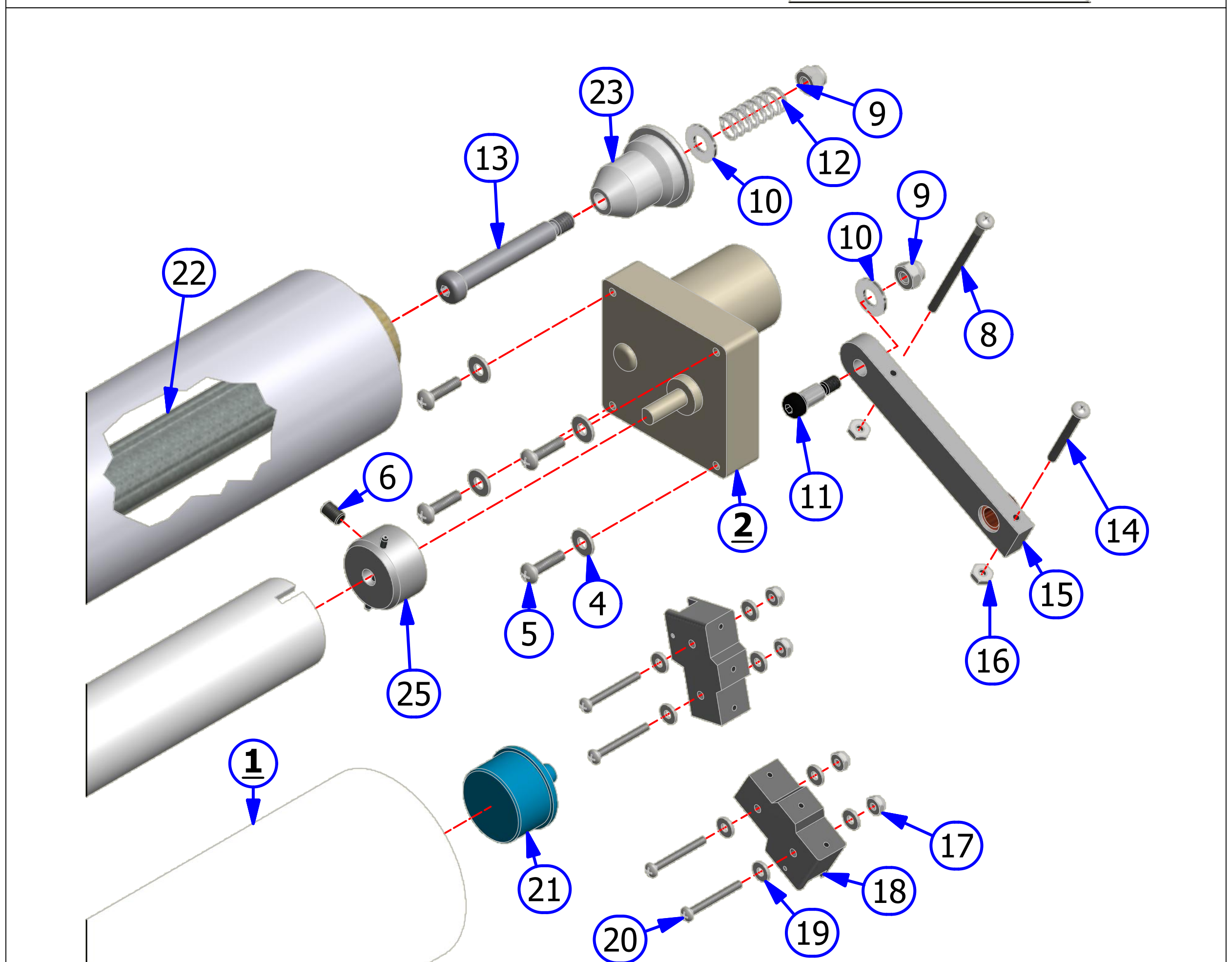
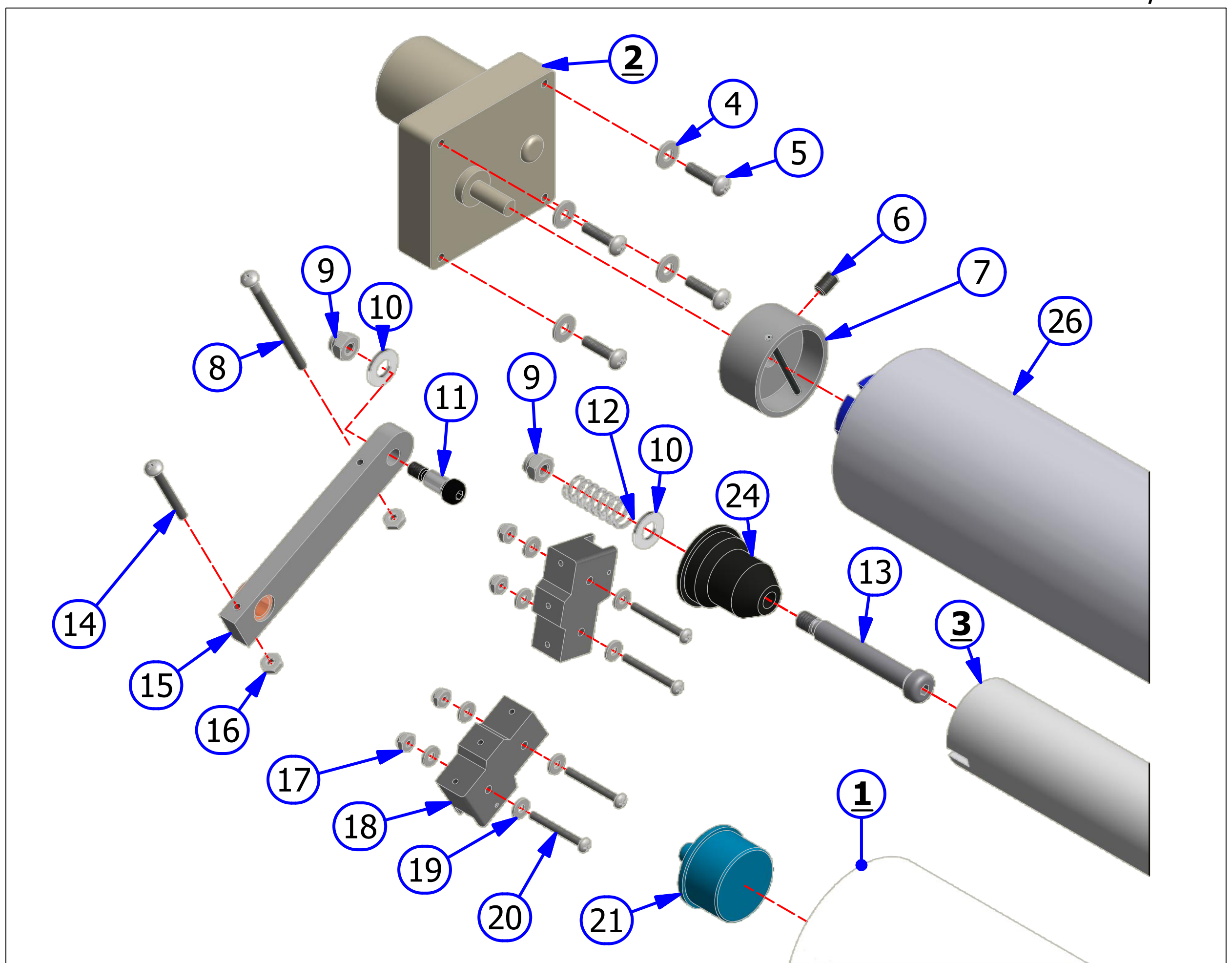
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	154-8852	CLEANER HOSE AND TIP ASSEMBLY (COMPLETE)	EA
1.1	1	164-0012M	CLEANER TIP W/CHECK VALVE	EA
1.2	1	154-0863	FITTING - MALE LUER TO 1/8 IN HOSE BARB	EA
1.3	1	153-2713	SPRING - TIP RETAINER	EA
1.4	1	153-2804	COLLAR - 3/8 X 3/4 X 3/8	EA
1.5	1	153-2902	COLLAR - 1/2 X 1 1/8 X 1/2	EA
2	1	154-9201	HEAD DRIVE BELT ASSEMBLY (101")	EA
3	1	154-9205B	PULLEY (28XL 3/8" BORE W/DBL SET) 230V	EA
4	4	153-2603	HHCS - 1/4-20 X 3/4	EA
5	4	153-2014	1/4 LOCKWASHER	EA
6	2	154-9804	FLANGED BEARING FOR CLEANER DRIVE SHAFT	EA
7	1	154-6878	CLEANER HEAD DRIVE SHAFT BLOCK	EA
8	1	164-6047	FLEX CLEANER HEAD DRIVE SHAFT BLOCK	EA
9	1	154-6884	6 TOOTH SENSOR DISK	EA
10	1	154-9805	PULLEY - 32XL037 - 3/8 BORE DF DBL SET	EA
11	2	153-2231	LOCKNUT - 4-40	EA
12	2	153-2001	#6 FLATWASHER	EA
13	1	164-6064	CLEANER HEAD IDLER MOUNT BLOCK	EA
14	1	154-1220	PROXIMITY SENSOR	EA
15	2	153-2516	MS PHILLIPS - 4-40 X 1-1/2	EA
16	1	154-6889	CLEANER HOSE ROUTING BAR	EA
17	1	154-0867	SPRING , CLEANER HOSE	EA
18	2	154-6888	CLEANER HOSE SPRING MOUNT BLOCK	EA
19	1	154-0202A	TUBING STOCK 1/4 X 1/8OD	IN
20	1	154-0221	BULKHEAD UNION - 1/4 IN TUBING	EA
21	1	154-0222	ELBOW - 1/4" STEM X 1/4" TUBING OD	EA
22	1	153-2006	3/8 FLATWASHER	EA
23	1	153-2021A	LOCKNUT - 3/8-16 (STOVER)	EA
24	2	153-2009	NYLON FLAT WASHER (3/8 - 0.060)	EA
25	1	153-9035	PULLEY - 28XL037 - 1/2 BORE NO SET SCREW	EA
26	1	153-2815	HHCS - 3/8-16 X 2-1/4 (GRADE 8)	EA
27	3	154-6874	HEAD BAR SPACER	EA
28	1	154-6877	CLEANER HEAD GUIDE BAR	EA
29	4	153-2081	MS PHILLIPS - 6-32 X 1/2	EA
30	1	154-6646	HEAD BELT MOUNT PLATE	EA



DUSTER ASSEMBLY

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<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	153-8839	CUSHION ROLLER WITH WRAP ASSEMBLY	EA
1.1		154-8839A	CUSHION ROLLER COVER - SIZE A	EA
1.2		154-8839B	CUSHION ROLLER COVER - SIZE B	EA
1.3		154-8839C	CUSHION ROLLER COVER - SIZE C	EA
1.4		154-8839D	CUSHION ROLLER COVER - SIZE D	EA
1.5		154-8839E	CUSHION ROLLER COVER - SIZE E	EA
2	2	158-8403	DUSTER MOTOR ASSEMBLY	EA
3	1	153-8824	PVC TAKE UP REEL	EA
4	8	153-2003	#10 - FLATWASHER	EA
5	8	153-2091	MS PHILLIPS - 10-32 X 3/4	EA
6	2	153-2050	SET SCREW 1/4-28 X 3/8	EA
7	1	153-8201B	DUSTER DRIVE HUB ASSEMBLY (1/4-28)	EA
8	2	153-2927	MS - PHILLIPS - 8-32 X 2-3/4 (PAN HEAD)	EA
9	4	153-2020A	STOVER NUT - 1/4-20	EA
10	4	153-2004	FLAT WASHER 1/4-20	EA
11	2	153-2408	SHOULDER BOLST - 5/16 X 1/2 (1/4-20)	EA
12	2	153-2093	SPRING 0.42 OD X .75	EA
13	2	153-2535	SHOULDER BOLT - 5/16 X 2 1/4 (1/4-20)	EA
14	1	153-2090	MS - PHILLIPS - -32 X 1-1/2	EA
15	2	153-8420	CUSHION ROLLER PIVOT ARM	EA
16	4	153-2414	HEX NUT 8-32	EA
17	8	153-2018	LOCKNUT 6-32	EA
18	2	154-1603	MICROSWITCH WITHOUT ROLLER (LARGE)	EA
19	16	153-2001	FLAT WASHER #6	EA
20	8	153-2085	MS PHILLIPS - 6-32 X 1 1/4	EA
21	2	153-9051	CUSHION ROLLER PLUG WITH STUD	EA
22	1	153-0429	DUSTER ROLL SUPPORT PIPE (40 INCH)	EA
23	1	164-6108	DUSTER PLUG CARDBOARD CORE	EA
24	1	164-6109	UHMW DUSTER PLUG FOR PVC TAKE UP REEL	EA
25	1	153-8202B	DUSTER SOLID DRIVE HUB (PVC)	EA
26	1	153-0047EZ	K2 SELECT DUSTER CLOTH (BOX OF 4)	CASE



RECOVERY TANK

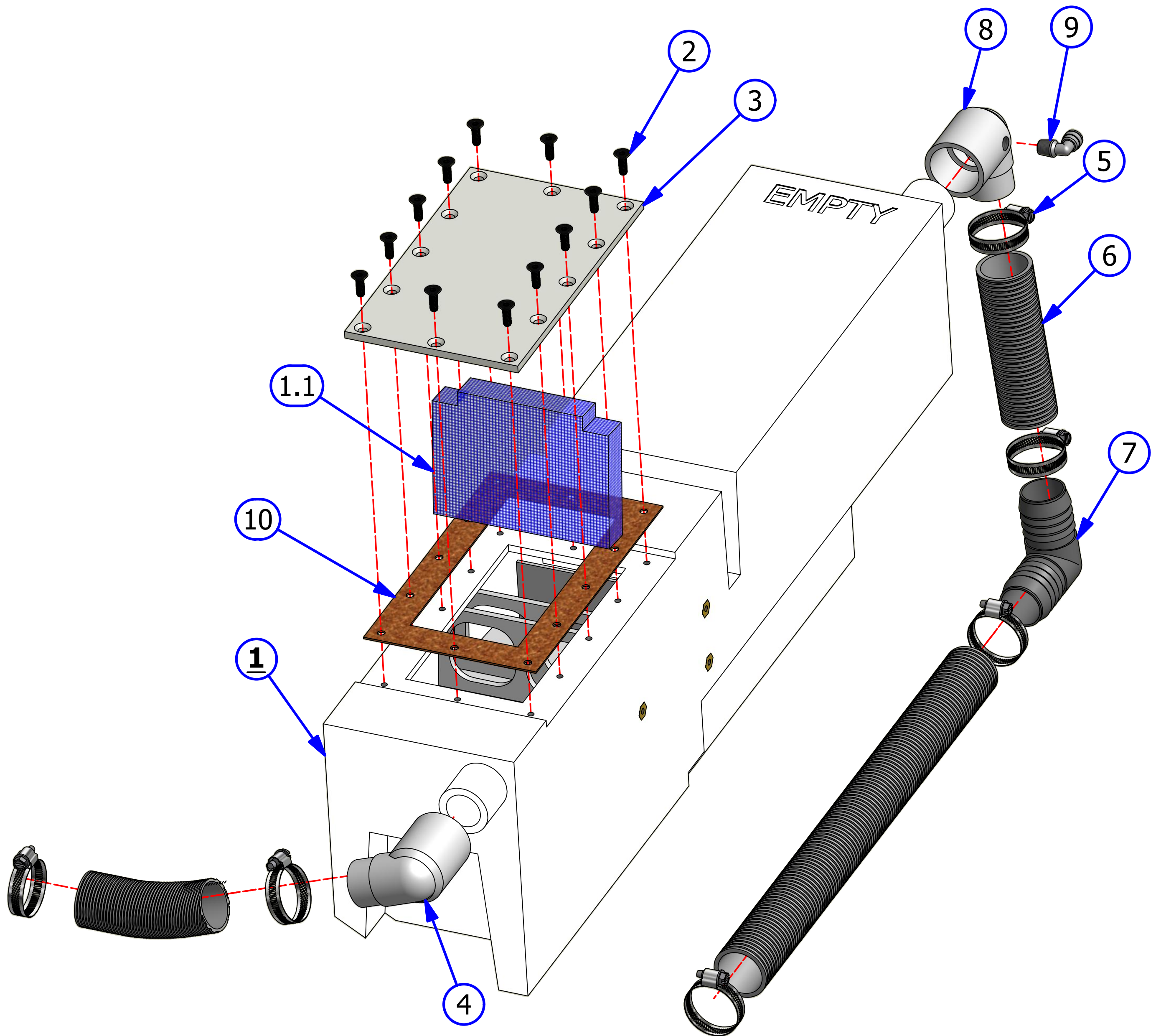
REV. 1/14

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8017	FLEX RECOVERY TANK	EA
1.1	1	164-8017F	TANK FILTER (FLX-17733 / FXW-13229 AND ABOVE)	EA
1.2	1	164-6114	TANK FILTER (FLX-17732 / FXW-13228 AND BELOW)	EA
2	12	153-2968	SCREW - 1/4-20 X 3/4 FSHCS	EA
3	1	164-6120	FLEX RECOVERY TANK COVER PLATE	EA
4	1	153-8827T	1-1/4 PVC ELBOW-TANK INLET (NO THREADS)	EA
5	6	153-2406	HOSE CLAMP (2 INCH)	EA
6	1	154-0260	FLEXIABLE HOSE - SOLD BY THE INCH	IN
7	1	154-0607	PVC ELBOW - 1-1/2 BARB X 1-1/2 BARB	EA
8	1	158-6244	ELBOW -RECOVERY TANK WITH TAPPED HOLE	EA
9	1	154-0223	ELBOW - 1/4" TUBE X 1/4" NPT	EA
10	1	158-0405	FLEX RECOVERY TANK GASKET	EA



TECHNICAL NOTE

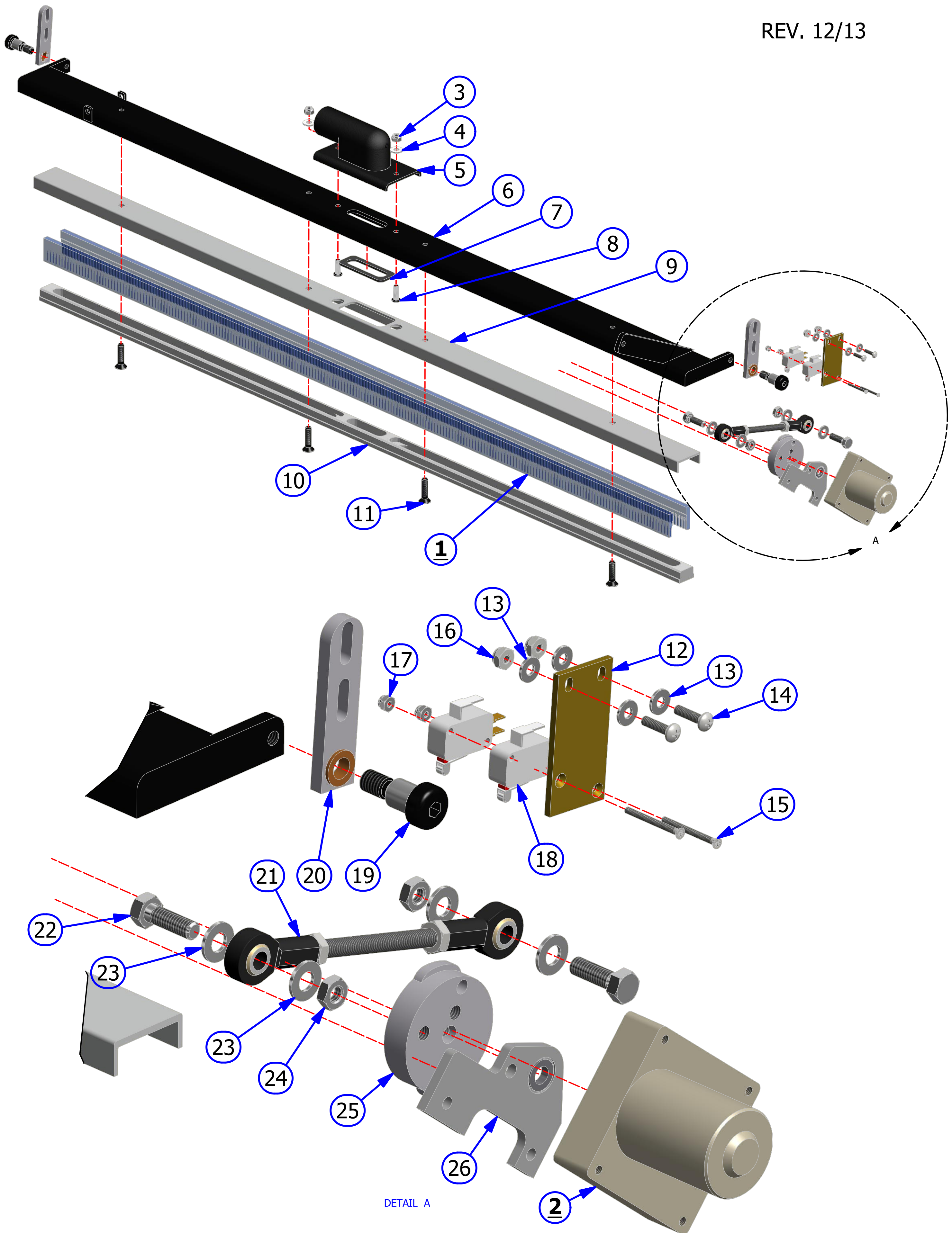
THE FLEX RECOVERY TANKS WERE MODIFIED AFTER PRODUCTION AND DIFFERENT FILTERS ARE CUSTOM CUT TO THE SPECIFIED SERIAL NUMBER. WHILE THE PART NUMBER FOR THE RECOVERY TANK STAYED THE SAME, THE FILTER DID NOT.



SQUEEGEE ASSEMBLY

REV. 1/14

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	153-8204E	SQUEEGEE BLADE REPLACEMENT (1 SET)	EA
2	1	158-8402	MOTOR ASSEMBLY -24VDC	EA
3	2	153-2020	LOCKNUT - 1/4-20 (NYLOK)	EA
4	2	153-2004	1/4 FLATWASHER	EA
5	1	154-6677A	SQUEEGEE HOSE ADAPTER NYLON	EA
6	1	154-6339	SQUEEGEE MOUNT ANGLE - BLACK (USE 154-6339-2850)	EA
7	1	164-0003	SQUEEGEE GASKET	EA
8	2	164-2023	BHSCS 1/4-20 X 3/4	EA
9	1	164-6074	EXTRUDED SQUEEGEE CHANNEL	EA
10	1	164-6075	MACHINED SQUEEGEE CHANNEL INSERT	EA
11	4	153-2503	FHSS - 5/16-18 X 1-1/4	EA
12	1	154-6824	SQUEEGEE CAM SWITCH PLATE	EA
13	4	153-2002	#8 FLATWASHER	EA
14	2	153-2086	MS PHILLIPS - 8-32 X 5/8	EA
15	2	153-2727	4-40 X 1-1/4 FHMS	EA
16	2	153-2019	LOCKNUT - 8-32 (NYLOK)	EA
17	2	153-2231	LOCKNUT - 4-40	EA
18	2	153-1203	MICROSWITCH W/ROLLER	EA
19	2	153-2303	SHOULDER BOLT-3/8 X 5/8 (5/16-18)	EA
20	2	154-6822	SQUEEGEE ADJUSTMENT ARM	EA
21	2	153-0211	ROD END	EA
22	2	153-2061	HHCS - 5/16-18 X 1	EA
23	4	153-2005	5/16 FLATWASHER	EA
24	2	153-2027A	JAM NUT - 5/16-18	EA
25	1	154-6243	MOTOR CAM-DUAL LOBES (STACKED SWITCHES)	EA
26	1	158-8634	SQUEEGEE/BRUSH MOUNT PLATE ASSEMBLY	EA



VACUUM MOTOR ASSEMBLY

REV. 1/14

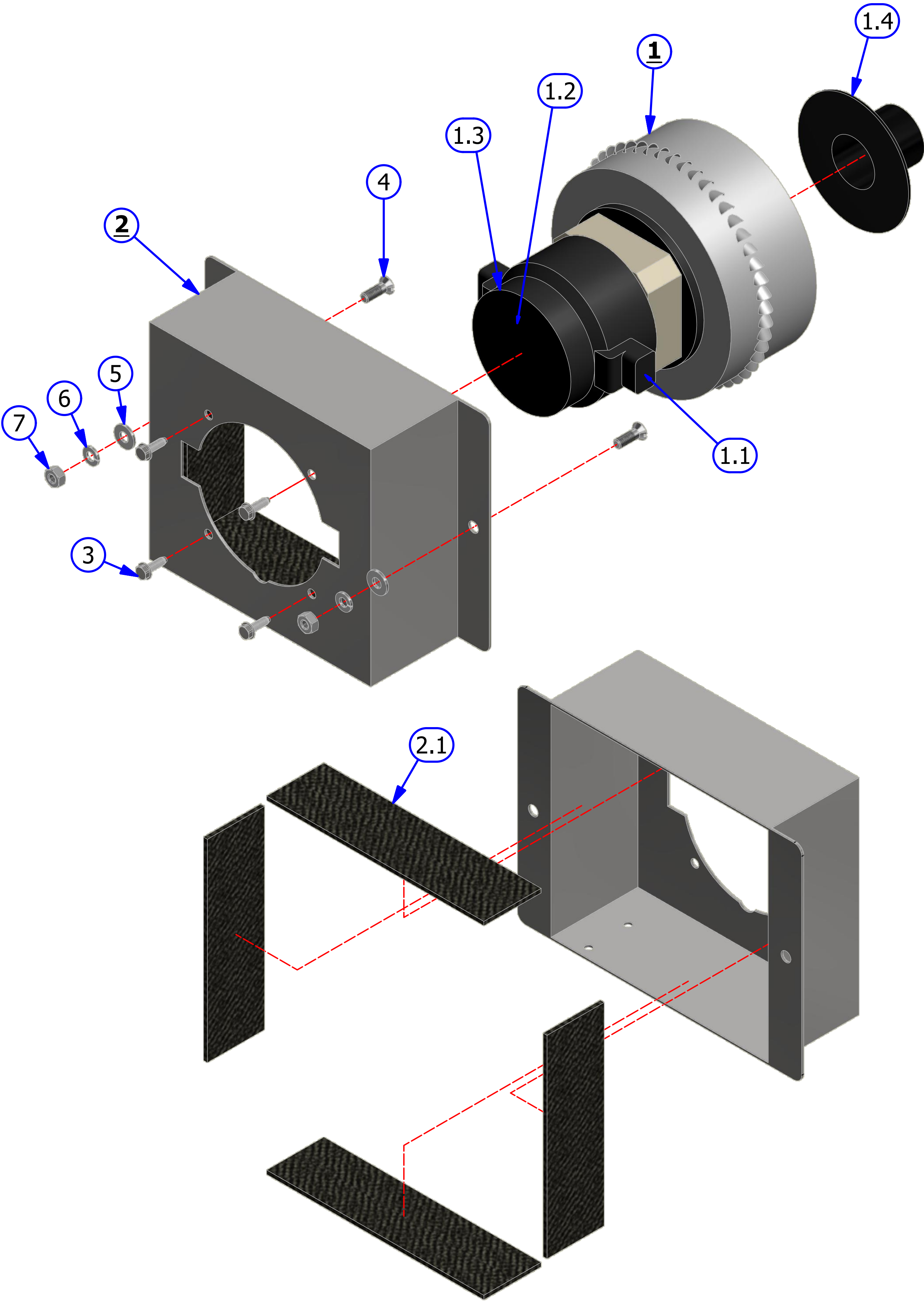
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	158-8407	VACUUM MOTOR ASSEMBLY (COMPLETE)	
1.1	1	158-1421B	VACUUM MOTOR BRUSHES	PR
1.2	1	153-0204F	FAN BLADE	EA
1.3	1	153-0204H	FAN BLADE COVER	EA
1.4*	1	153-6221M	VACUUM WALL PLASTIC ADAPTER (See Below)	EA
2	1	158-8618	VACUUM MOTOR HOUSING	
2.1		154-0228S	STOCK - 1/8 IN GRAY FELT	IN
3	4	153-2830	HEX HEAD SELF TAP #10 X 5/8 SCREW	EA
4	2	153-2078	FHMS - 1/4 - 20 X 3/4	EA
5	2	153-2004	1/4 FLAT WASHER	EA
6	2	153-2014	1/4 LOCK WASHER	EA
7	2	153-2023	1/4/-20 HEX NUT	EA



TECHNICAL NOTE

WHEN ATTACHING PART NUMBER 153-6221M, USE A TWO (2) PART EPOXY AND ALLOW TO DRY ACCORDING TO DIRECTIONS.

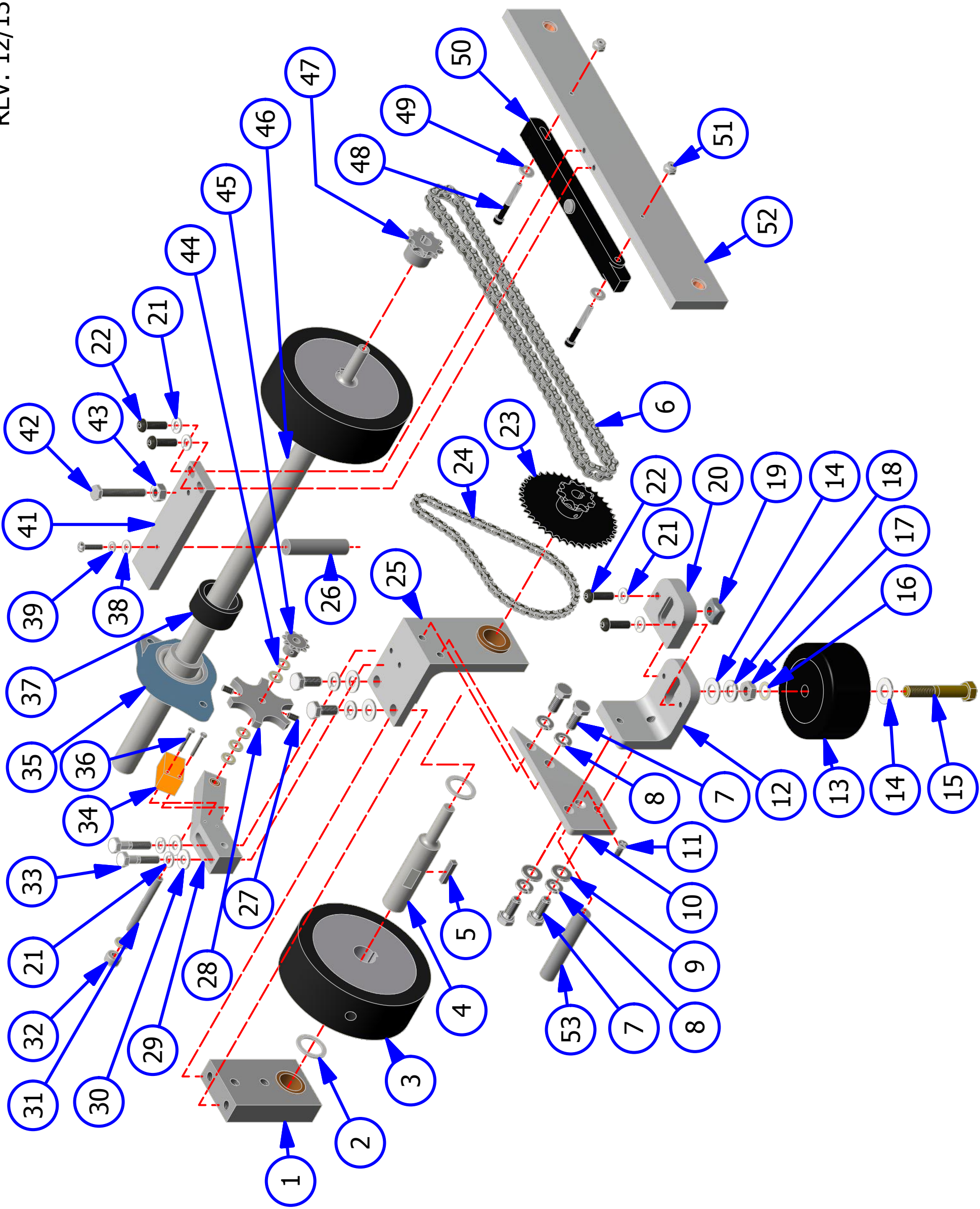
BE CAREFUL NOT TO CRUSH THE VACUUM MOTOR HOUSING INTO INTERNAL BLADES.



ZTR ASSEMBLY - LEFT

REV. 1/14

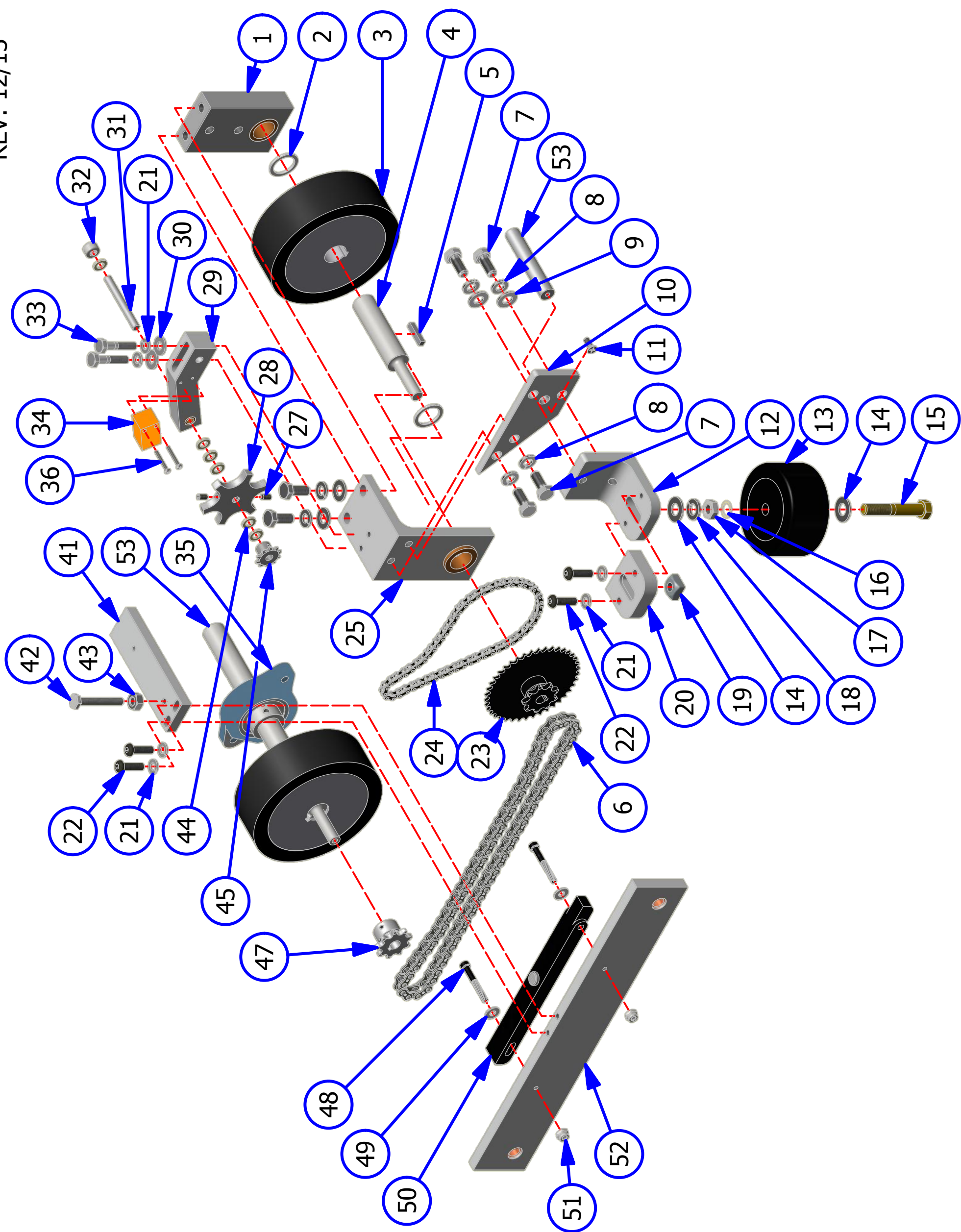
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-6034	KICK-UP WHEEL MOUNTING BLOCK	EA
2	2	153-2939	NYLON WASHER	EA
3	2	158-7001	DRIVE WHEEL 4.5 IN	EA
4	1	164-6030	FLEX KICK-UP WHEEL SHAFT	EA
5	2	153-2101	KEYSTOCK - 3/16 X 7/8	IN
6	1	164-9005	CHAIN (35P67) ZTR KICKUP	EA
7	6	153-2602	HHCS - 5/16-18 X 3/4	EA
8	6	153-2015	5/16 LOCKWASHER	EA
9	4	153-2005	5/16 FLATWASHER	EA
10	1	164-6037	BUMPER WHEEL MOUNTING PLATE	EA
11	1	153-2604	MS FLAT PHILLIPS - 10-32 X 1/2	EA
12	1	164-6038	BUMPER WHEEL ANGLE MOUNT	EA
13	1	153-7203A	BUMPER WHEEL	EA
14	2	153-2006	3/8 FLATWASHER	EA
15	1	153-2815	HHCS - 3/8-16 X 2-1/4 (GRADE 8)	EA
16	1	153-2531	NYLON FLAT WASHER - 3/8 (0.030)	EA
17	1	153-2027	JAM NUT - 3/8-16	EA
18	1	153-2016	3/8 LOCKWASHER	EA
19	1	164-2005	SQUARE NUT - 3/8-16	EA
20	1	164-6039	BUMPER WHEEL NUT RETAINER	EA
21	4	153-2014	1/4 LOCKWASHER	EA
22	4	153-2052A	BHSS - 1/4-20 X 7/8	EA
23	1	164-9002	SPROCKET - 40B10 (5/8")	EA
24	1	164-9004	CHAIN (25P55) ZTR FLEX	EA
25	1	164-6035	KICK-UP WHEEL ANGLE - LEFT	EA
27	2	153-2201	SET SCREW - 10-32 X 3/8	EA
28	1	154-6831	6-TOOTH SENSOR DISK-ALUMINUM	EA
29	1	164-6065	DISK SHAFT BUSHING MOUNT	EA
30	2	153-2004	1/4 FLATWASHER	EA
31	1	158-6626	6 TOOTH DISK SHAFT	EA
32	1	153-2703	STEEL COLLAR - 1/4 X 3/8	EA
33	2	153-2055	HHCS - 1/4-20 X 1-1/2	EA
34	1	154-1220	INDUCTIVE PROXIMITY SENSOR (TL-Q5MC1)	EA
35	1	153-9816	BEARING HOUSING	EA
36	2	153-2216A	MS PHILLIPS - 4-40 X 7/8	EA
41	1	164-6033	FLEX ZTR SUPPORT MOUNT	EA
42	1	153-2528	HHCS - 1/4-20 X 1-3/4 (FULL THREAD)	EA
43	1	153-2024	HEX NUT - 5/16-18	EA
44	6	153-2510	NYLON WASHER - 1/4 (0.060)	EA
45	1	158-9613	SPROCKET - 25B10 1/4 BORE - 10-24 2SS	EA
47	1	164-9003	SPROCKET - 40B10 (5/8")	EA
48	2	164-2004	SHCS - 10-24 X 1-1/2	EA
49	2	153-2035	BLIND RIVET WASHER - 3/16	EA
50	1	164-6031	FLEX ZTR CHAIN TENSIONER	EA
51	2	153-2208	LOCKNUT - 10-24 (NYLOK)	EA
52	1	164-6040	FLEX ZTR SHAFT SUPPORT	EA
53	1	164-6028	FLEX ZTR DRIVE SHAFT- LEFT	EA



ZTR ASSEMBLY - RIGHT

REV. 1/14

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-6034	KICK UP WHEEL MOUNTING BLOCK	EA
2	2	153-2939	NYLON WASHER	EA
3	2	158-7001	DRIVE WHEEL 4.5 IN	EA
4	1	164-6030	FLEX KICK-UP WHEEL SHAFT	EA
5	2	153-2101	KEYSTOCK - 3/16 X 7/8	EA
6	1	164-9005	CHAIN (35P67) ZTR KICKUP	EA
7	6	153-2602	HHCS - 5/16-18 X 3/4	EA
8	6	153-2015	5/16 LOCKWASHER	EA
9	4	153-2005	5/16 FLATWASHER	EA
10	1	164-6037	BUMPER WHEEL MOUNTING PLATE	EA
11	1	153-2604	MS FLAT PHILLIPS - 10-32 X 1/2	EA
12	1	164-6038	BUMPER WHEEL MOUNT ANGLE	EA
13	1	153-7203	BUMPER WHEEL	EA
14	2	153-2006	3/8 FLATWASHER	EA
15	1	153-2815	HHCS - 3/8-16 X 2-1/4 (GRADE 8)	EA
16	1	153-2531	NYLON FLAT WASHER - 3/8 (0.030)	EA
17	1	153-2027	JAM NUT - 3/8-16	EA
18	1	153-2016	3/8 LOCKWASHER	EA
19	1	164-2005	SQUARE NUT - 3/8-16	EA
20	1	164-6039	BUMPER WHEEL NUT RETAINER	EA
21	4	153-2014	1/4 LOCKWASHER	EA
22	4	153-2052A	BHSS - 1/4-20 X 7/8	EA
23	1	164-9002	SPROCKET - 40B10 (5/8")	EA
24	1	164-9004	CHAIN (25P55) ZTR FLEX	EA
25	1	164-6036	KICK UP WHEEL RIGHT	EA
26	1	164-6162	GUARD STAND OFF	EA
27	2	153-2201	SET SCREW - 10-32 X 3/8	EA
28	1	154-6831	6-TOOTH SENSOR DISK-ALUMINUM	EA
29	1	164-6065	DISK SHAFT BUSHING MOUNT	EA
30	2	153-2004	1/4 FLATWASHER	EA
31	1	158-6626	6 TOOTH DISK SHAFT	EA
32	1	153-2703	STEEL COLLAR - 1/4 X 3/8	EA
33	2	153-2055	HHCS - 1/4-20 X 1-1/2	EA
22	4	153-2052A	BHSS - 1/4-20 X 7/8	EA
23	1	164-9002	SPROCKET - 40B10 (5/8")	EA
24	1	164-9004	CHAIN (25P55) ZTR FLEX	EA
25	1	164-6036	KICK UP WHEEL RIGHT	EA
26	1	164-6162	GUARD STAND OFF	EA
27	2	153-2201	SET SCREW - 10-32 X 3/8	EA
28	1	154-6831	6-TOOTH SENSOR DISK-ALUMINUM	EA
29	1	164-6065	DISK SHAFT BUSHING MOUNT	EA
30	2	153-2004	1/4 FLATWASHER	EA
31	1	158-6626	6 TOOTH DISK SHAFT	EA
32	1	153-2703	STEEL COLLAR - 1/4 X 3/8	EA
33	2	153-2055	HHCS - 1/4-20 X 1-1/2	EA
34	1	154-1220	INDUCTIVE PROXIMITY SENSOR	EA
35	1	153-9816	3/4 IN FLANGED BEARING - 5/16-18 TAPPED	EA
36	2	153-2216A	MS PHILLIPS - 4-40 X 7/8	EA
37	1	164-6142	REAR DRIVE CHAIN IDLER	EA
38	1	153-2002	#8 FLATWASHER	EA
39	1	153-2013	#10 LOCKWASHER	EA
40	1	153-2087	MS PHILLIPS - 8-32 X 3/4	EA
41	1	164-6033	FLEX ZTR SUPPORT MOUNT	EA



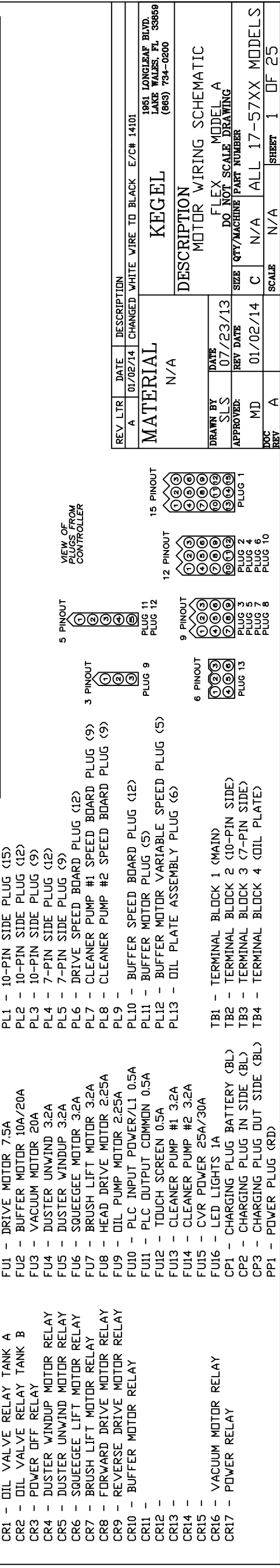
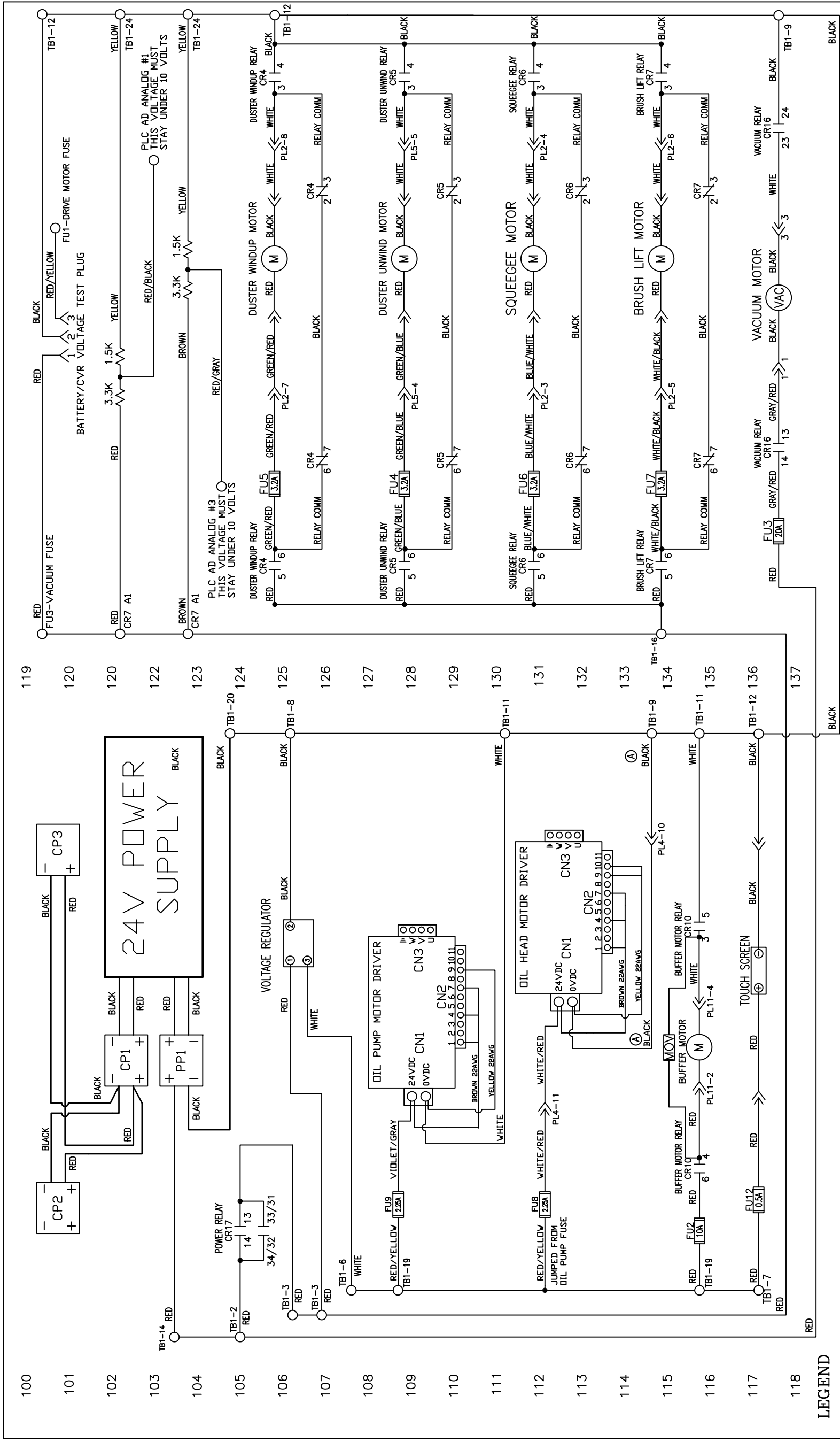
CHAPTER 9

Electrical Drawings

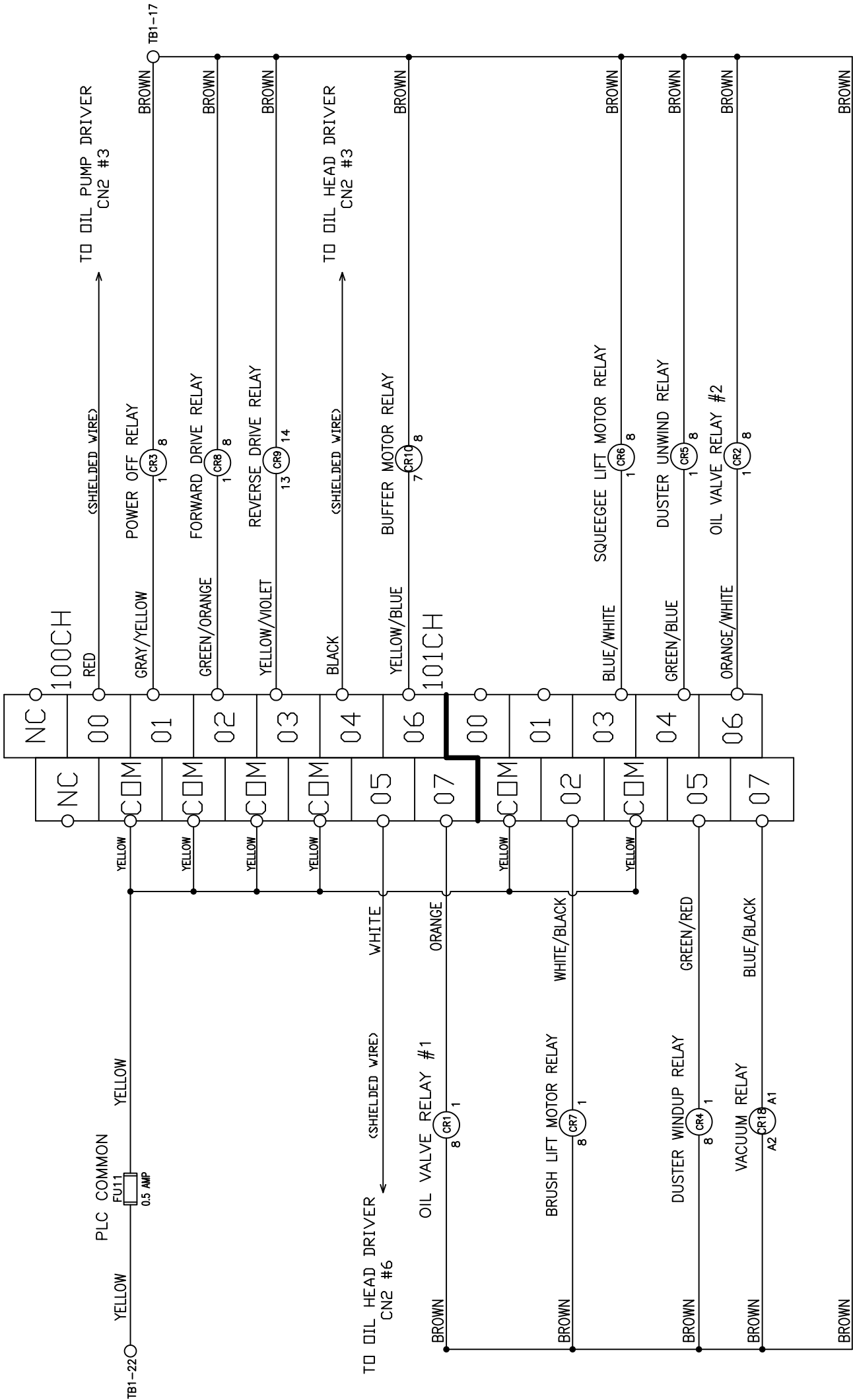
Flex Wiring Diagrams

The following diagrams show wiring schematics for the Kustodian Walker. Detailed diagrams for the Ion follow this section. If you have any questions please call 863-734-0200 or email tech@kegel.net .

Flex Motor Wiring Layout.....	235
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DMRON
SYSMAC
CPIH
OUTPUTS

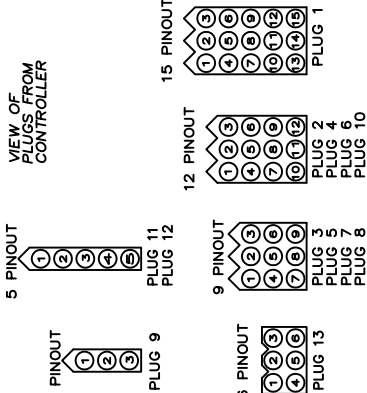


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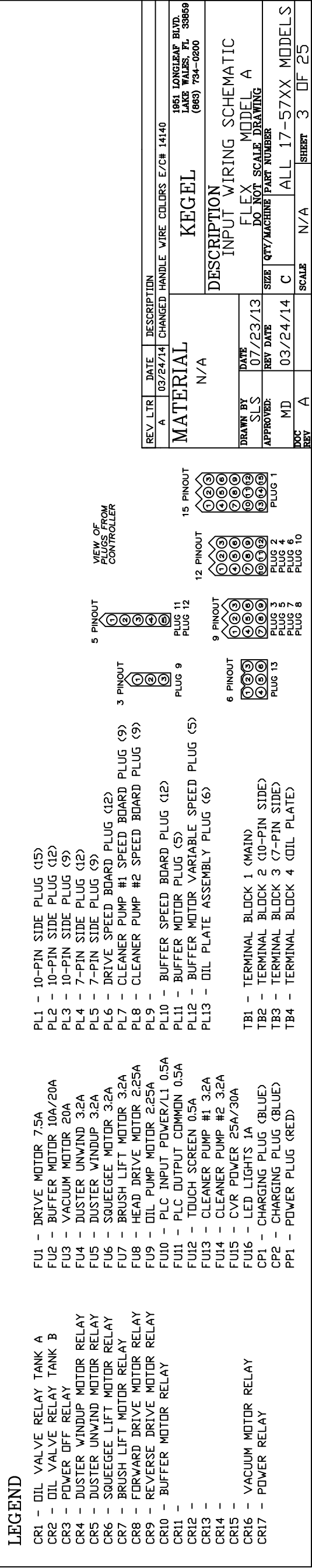
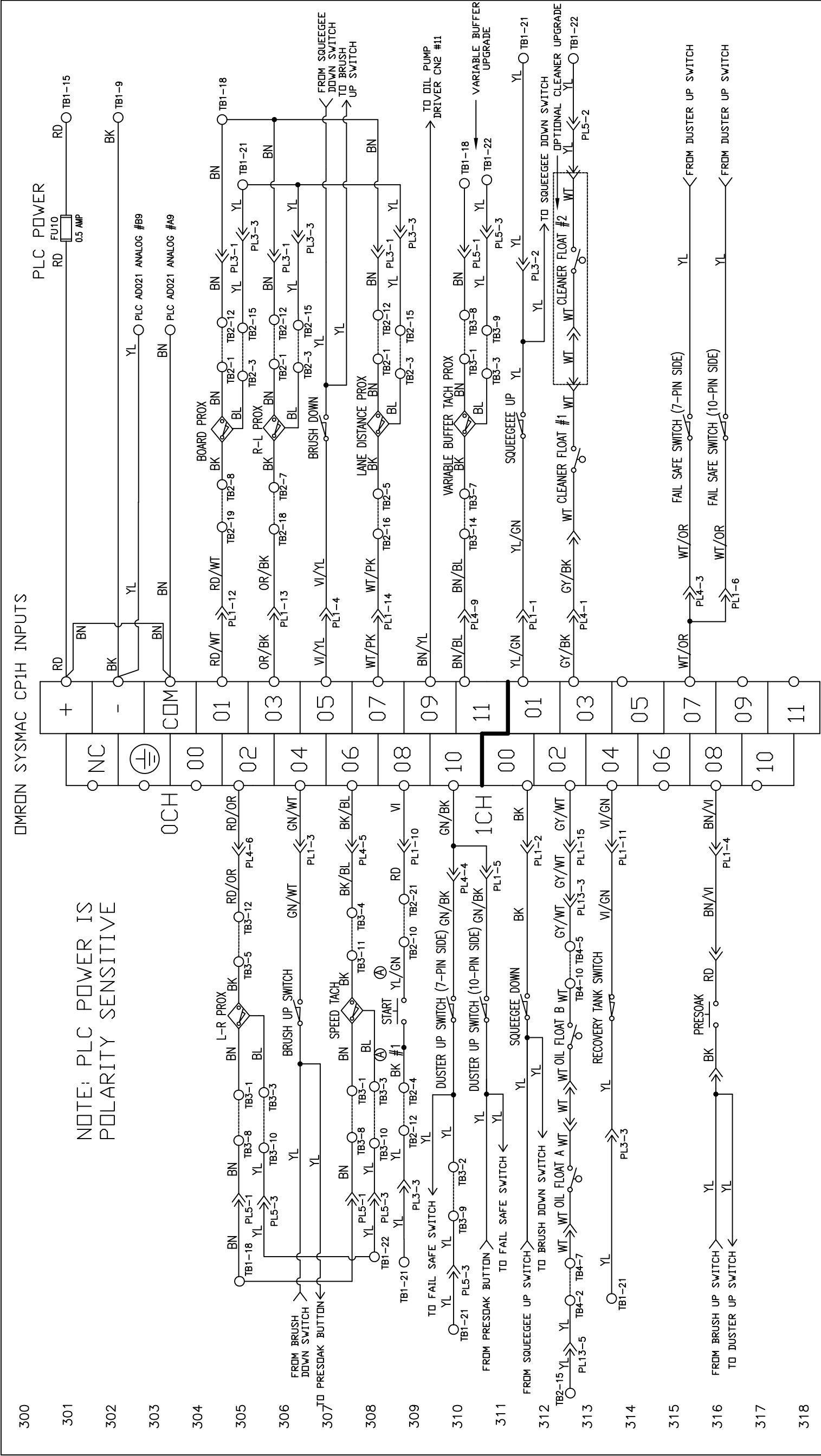
- CR1 - OIL VALVE RELAY TANK A
- CR2 - OIL VALVE RELAY TANK B
- CR3 - POWER OFF RELAY
- CR4 - DUSTER WINDUP MOTOR RELAY
- CR5 - DUSTER UNWIND MOTOR RELAY
- CR6 - SQUEEGEE LIFT MOTOR RELAY
- CR7 - BRUSH LIFT MOTOR RELAY
- CR8 - FORWARD DRIVE MOTOR RELAY
- CR9 - REVERSE DRIVE MOTOR RELAY
- CR10 - BUFFER MOTOR RELAY
- CR11 -
- CR12 -
- CR13 -
- CR14 -
- CR15 -
- CR16 - VACUUM MOTOR RELAY
- CR17 - POWER RELAY

- FU1 - DRIVE MOTOR 7.5A
- FU2 - BUFFER MOTOR 10A/20A
- FU3 - VACUUM MOTOR 20A
- FU4 - DUSTER UNWIND 3.2A
- FU5 - DUSTER WINDUP 3.2A
- FU6 - SQUEEGEE MOTOR 3.2A
- FU7 - SQUEEGEE LIFT MOTOR 3.2A
- FU8 - HEAD DRIVE MOTOR 2.25A
- FU9 - OIL PUMP MOTOR 2.25A
- FU10 - PLC INPUT POWER/L1 0.5A
- FU11 - PLC OUTPUT COMMON 0.5A
- FU12 - TOUCH SCREEN 0.5A
- FU13 - CLEANER PUMP #1 3.2A
- FU14 - CLEANER PUMP #2 3.2A
- FU15 - CVR POWER 25A/30A
- FU16 - LED LIGHTS 1A
- CP1 - CHARGING PLUG (BLUE)
- CP2 - CHARGING PLUG (BLUE)
- PP1 - POWER PLUG (RED)

- PL1 - 10-PIN SIDE PLUG (15)
- PL2 - 10-PIN SIDE PLUG (12)
- PL3 - 10-PIN SIDE PLUG (9)
- PL4 - 7-PIN SIDE PLUG (12)
- PL5 - 7-PIN SIDE PLUG (9)
- PL6 - DRIVE SPEED BOARD PLUG (12)
- PL7 - CLEANER PUMP #1 SPEED BOARD PLUG (9)
- PL8 - CLEANER PUMP #2 SPEED BOARD PLUG (9)
- PL9 -
- PL10 - BUFFER SPEED BOARD PLUG (12)
- PL11 - BUFFER MOTOR PLUG (5)
- PL12 - BUFFER MOTOR VARIABLE SPEED PLUG (5)
- PL13 - OIL PLATE ASSEMBLY PLUG (6)
- TB1 - TERMINAL BLOCK 1 (MAIN)
- TB2 - TERMINAL BLOCK 2 (10-PIN SIDE)
- TB3 - TERMINAL BLOCK 3 (7-PIN SIDE)
- TB4 - TERMINAL BLOCK 4 (OIL PLATE)



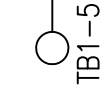
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N/A		DESCRIPTION	
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SLS	07/23/13	FLEX MODEL A	
APPROVED:	REV DATE	DO NOT SCALE DRAWING	
MD		SIZE	QTY/MACHINE PART NUMBER
DOC REV		C	N/A
		SCALE	N/A
		SHEET	2 OF 25



400

KEGEL P/N
154-1270

401



402



403



404



405



406



407



408



409



410



411



412



413



414



415



416



417



418

LEGEND

- CR1 - OIL VALVE RELAY TANK A
- CR2 - OIL VALVE RELAY TANK B
- CR3 - POWER OFF RELAY
- CR4 - DUSTER WINDUP MOTOR RELAY
- CR5 - DUSTER UNWIND MOTOR RELAY
- CR6 - SQUEEGEE LIFT MOTOR RELAY
- CR7 - BRUSH LIFT MOTOR RELAY
- CR8 - FORWARD DRIVE MOTOR RELAY
- CR9 - REVERSE DRIVE MOTOR RELAY
- CR10 - BUFFER MOTOR RELAY
- CR11 -
- CR12 -
- CR13 -
- CR14 -
- CR15 -
- CR16 - VACUUM MOTOR RELAY
- CR17 - POWER RELAY

- FU1 - DRIVE MOTOR 7.5A
- FU2 - BUFFER MOTOR 10A/20A
- FU3 - VACUUM MOTOR 20A
- FU4 - DUSTER UNWIND 3.2A
- FU5 - DUSTER WINDUP 3.2A
- FU6 - SQUEEGEE MOTOR 3.2A
- FU7 - BRUSH LIFT MOTOR 3.2A
- FU8 - HEAD DRIVE MOTOR 2.25A
- FU9 - OIL PUMP MOTOR 2.25A
- FU10 - PLC INPUT POWER/L1 0.5A
- FU11 - PLC OUTPUT COMMON 0.5A
- FU12 - TOUCH SCREEN 0.5A
- FU13 - CLEANER PUMP #1 3.2A
- FU14 - CLEANER PUMP #2 3.2A
- FU15 - CVR POWER 25A/30A
- FU16 - LED LIGHTS 1A
- CP1 - CHARGING PLUG (BLUE)
- CP2 - CHARGING PLUG (BLUE)
- PP1 - POWER PLUG (RED)

- PL1 - 10-PIN SIDE PLUG (15)
- PL2 - 10-PIN SIDE PLUG (12)
- PL3 - 10-PIN SIDE PLUG (9)
- PL4 - 7-PIN SIDE PLUG (9)
- PL5 - 7-PIN SIDE PLUG (9)
- PL6 - DRIVE SPEED BOARD PLUG (12)
- PL7 - CLEANER PUMP #1 SPEED BOARD PLUG (9)
- PL8 - CLEANER PUMP #2 SPEED BOARD PLUG (9)
- PL9 -
- PL10 - BUFFER SPEED BOARD PLUG (12)
- PL11 - BUFFER MOTOR PLUG (5)
- PL12 - BUFFER MOTOR VARIABLE SPEED PLUG (5)
- PL13 - OIL PLATE ASSEMBLY PLUG (6)

- TB1 - TERMINAL BLOCK 1 (MAIN)
- TB2 - TERMINAL BLOCK 2 (10-PIN SIDE)
- TB3 - TERMINAL BLOCK 3 (7-PIN SIDE)
- TB4 - TERMINAL BLOCK 4 (OIL PLATE)

VIEW OF
PLUGS FROM
CONTROLLER

5 PINOUT



3 PINOUT



PLUG 9

PLUG 11

PLUG 12

PLUG 1

PLUG 2

PLUG 3

PLUG 4

PLUG 5

PLUG 6

PLUG 7

PLUG 8

12 PINOUT



PLUG 11

PLUG 12

PLUG 1

PLUG 2

PLUG 3

PLUG 4

PLUG 5

PLUG 6

PLUG 7

PLUG 8

15 PINOUT



PLUG 11

PLUG 12

PLUG 1

PLUG 2

PLUG 3

PLUG 4

PLUG 5

PLUG 6

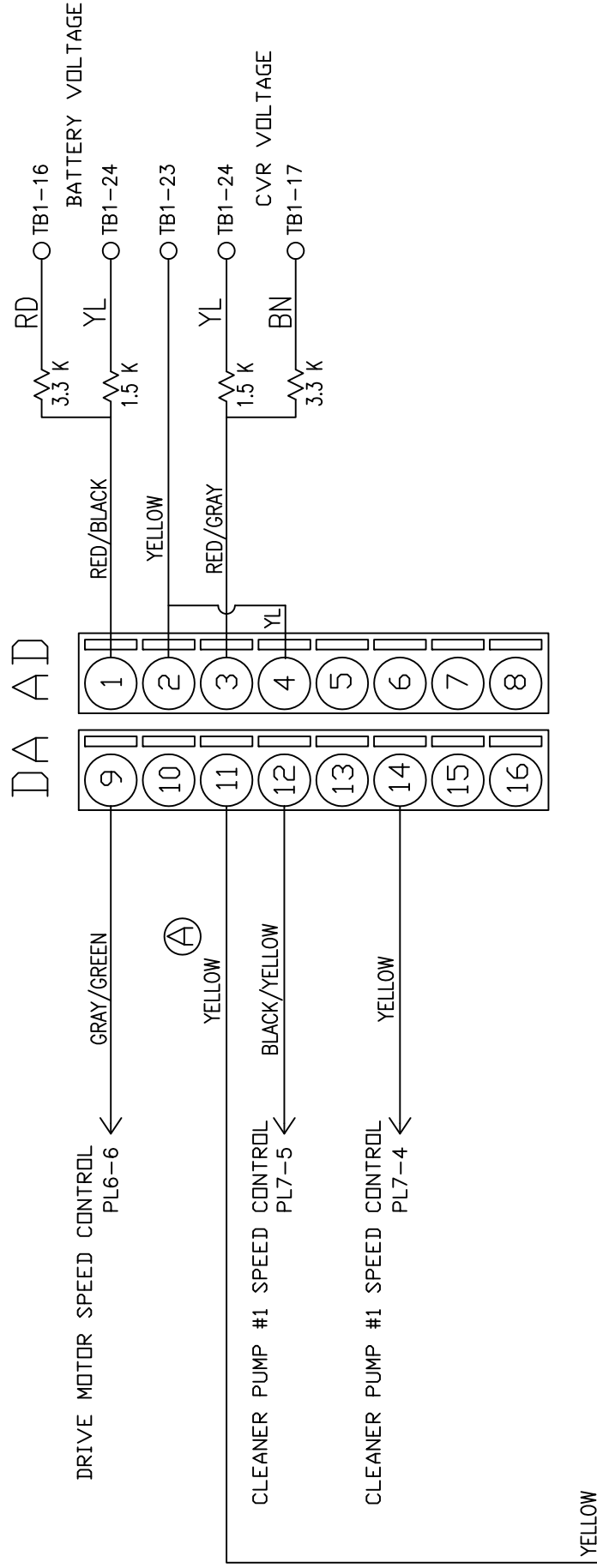
PLUG 7

PLUG 8

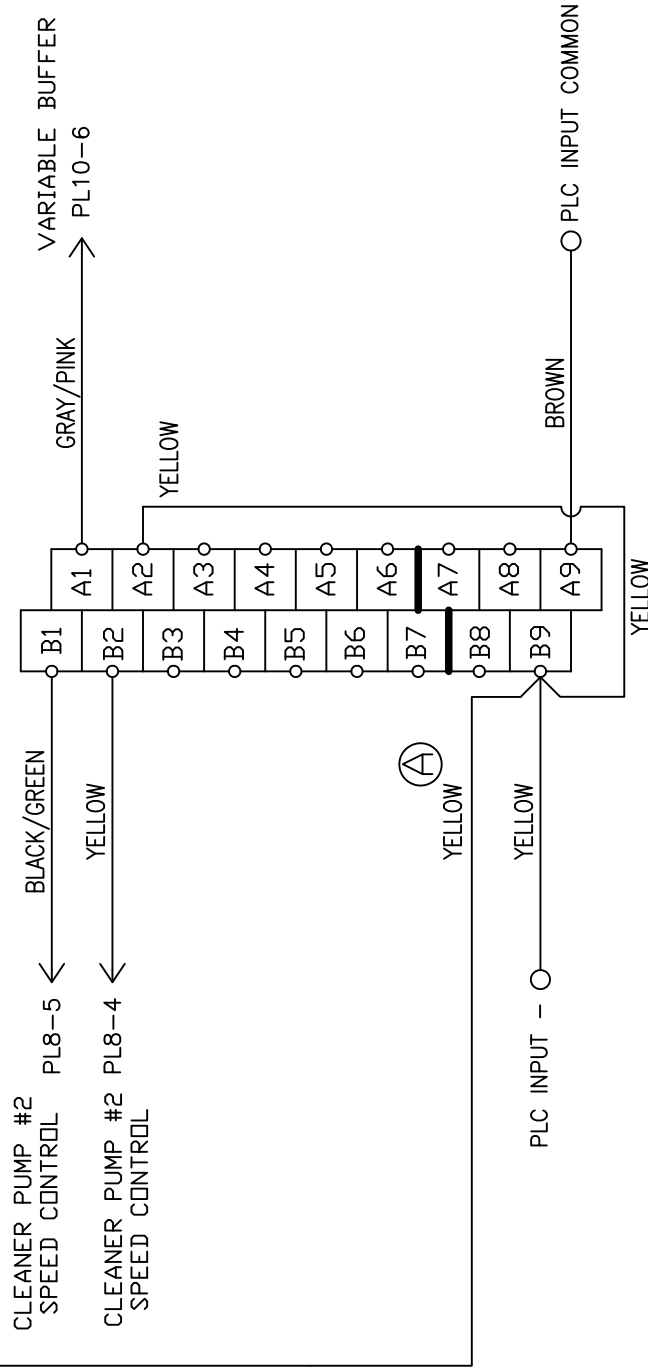
MATERIAL		N/A				KEGEL		1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (863) 734-0200	
DRAWN BY		DATE		DESCRIPTION					
SLS		07/23/13		SPEED CONTROL SCHEMATIC					
APPROVED:		REV DATE		FLEX MODEL A DO NOT SCALE DRAWING					
MD				SIZE		QTY/MACHINE PART NUMBER			
				C		N/A		ALL 17-57XX MODELS	
DOC				SCALE		N/A		SHEET	
REV						4		OF 25	

BUILT IN PLC ANALOG

REV	LTR	DATE	DESCRIPTION
A		10/28/14	ADDED YELLOW WIRE E/C# 14310



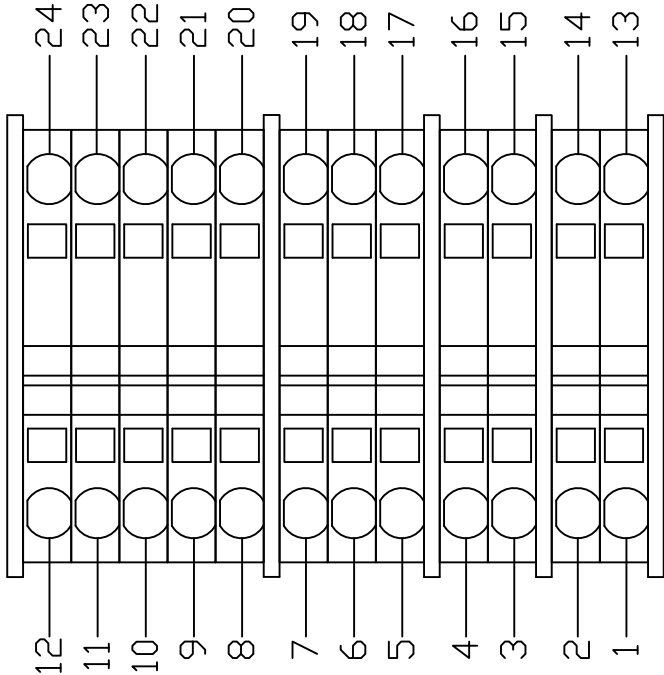
AD021 ANALOG ADD ON UNIT



MATERIAL		KEGEL		1061 LONGLEAF BLVD. LAKE WALKER, TX 75846 (940) 794-0200	
NA		DESCRIPTION ANALOG WIRING SCHEMATIC			
DRAWN BY		DATE		DO NOT SCALE DRAWING	
SLS		07/23/13		FLEX MODEL A	
APPROVED:		REV DATE		SIZE	
MD		10/28/14		C	
REV		SCALE		ALL 17-57XX MODELS	
A		N/A		SHEET 5 OF 25	

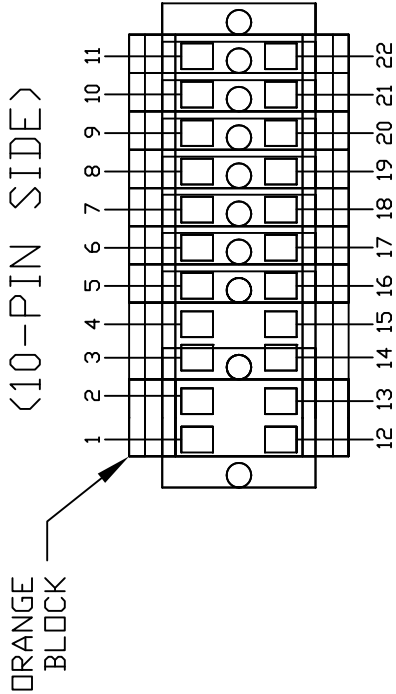
TB1

<MAIN>



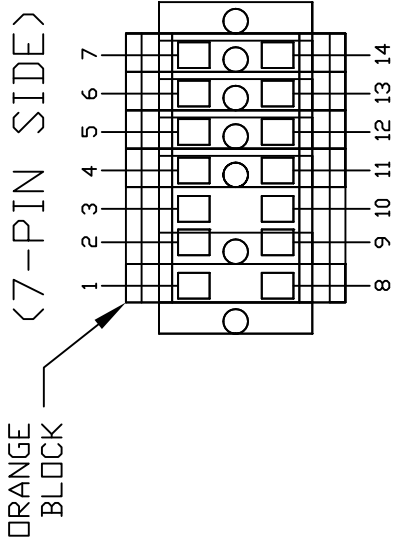
TB2

<10-PIN SIDE>



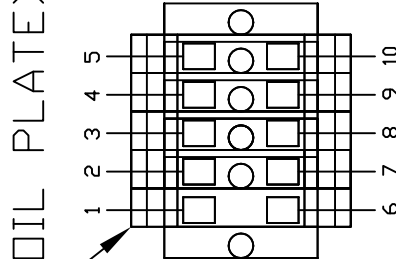
TB3

<7-PIN SIDE>



TB4

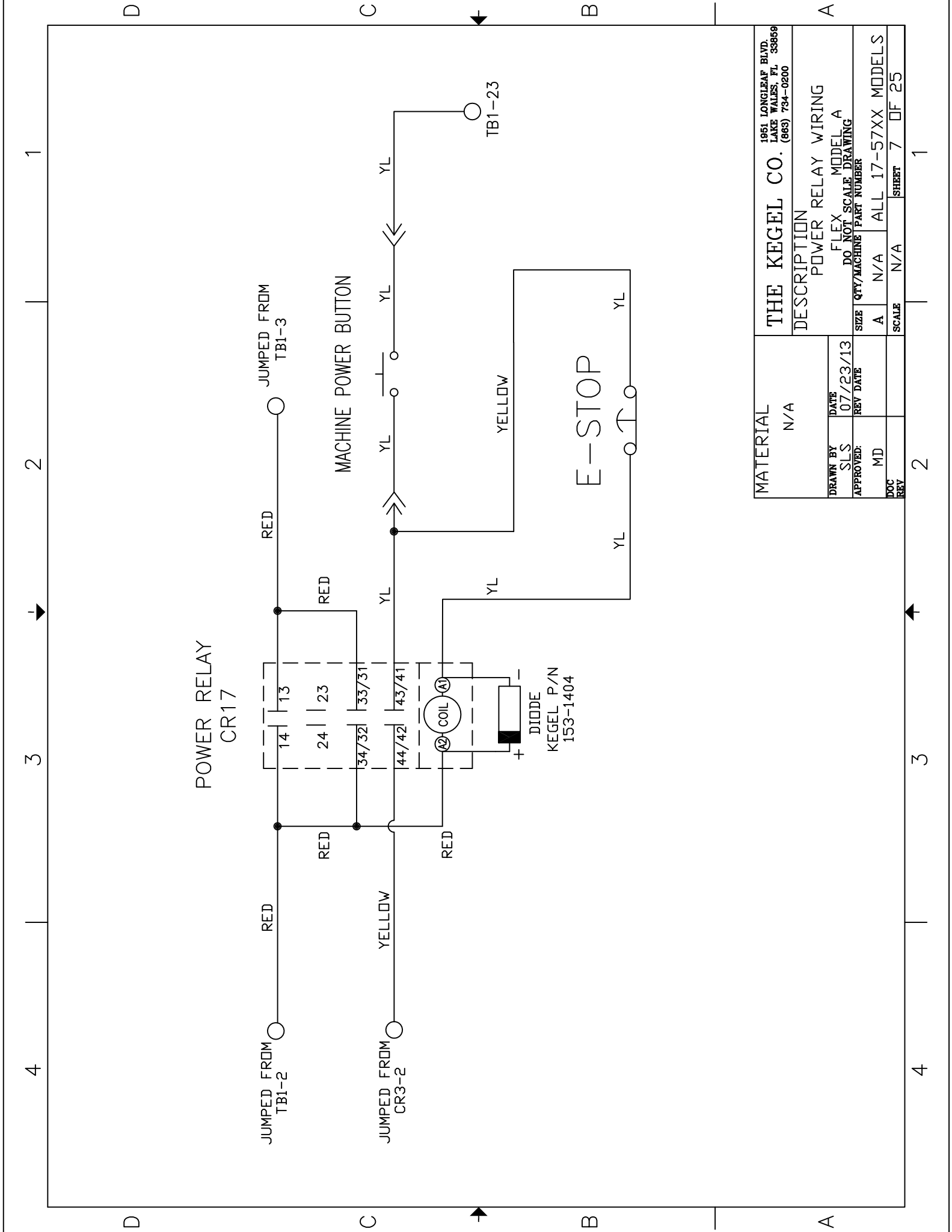
<OIL PLATE>



LEGEND

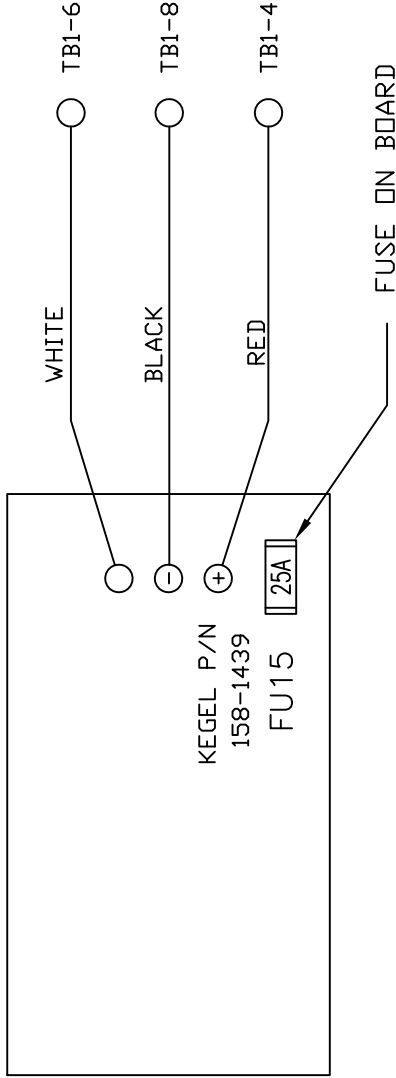
- TB1 - TERMINAL BLOCK 1 <MAIN>
- TB2 - TERMINAL BLOCK 2 <10-PIN SIDE>
- TB3 - TERMINAL BLOCK 3 <7-PIN SIDE>
- TB4 - TERMINAL BLOCK 4 <OIL PLATE>

MATERIAL NA		KEGEL 1951 LONGLEAF BLVD LAKE WALES, FL 33609 (813) 734-0200	
DESCRIPTION TERMINAL BLOCK LAYOUT		FLEX MODEL A	
DRAWN BY SLS	DATE 07/23/13	SIZE C	DO NOT SCALE DRAWING
APPROVED: MD	REV DATE	SCALE N/A	ALL 17-57XX MODELS
DOC REV		SHEET 6	OF 25

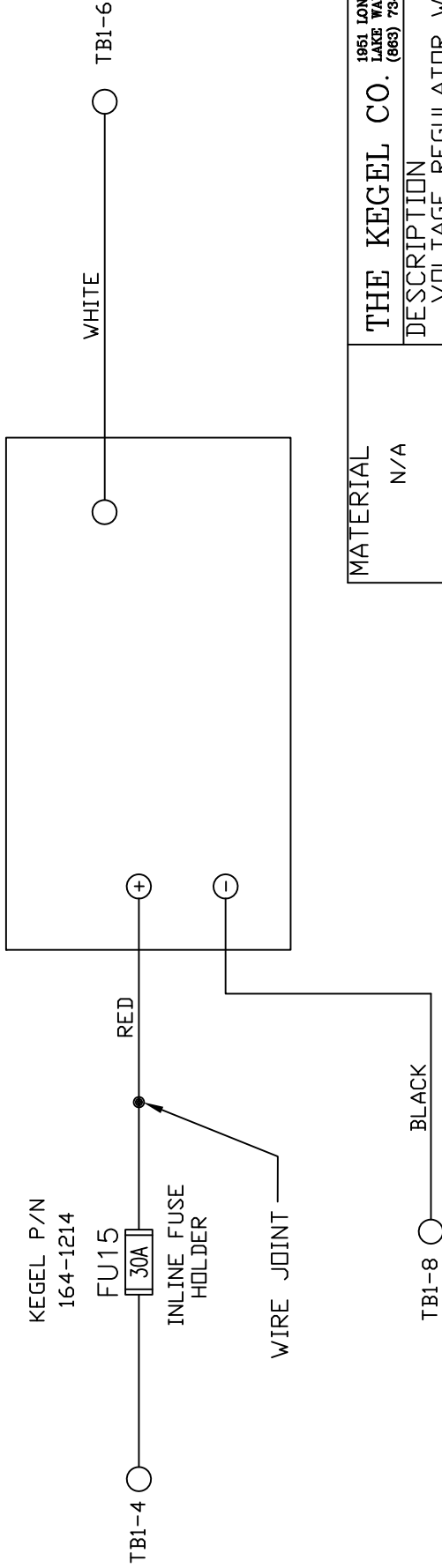


MATERIAL N/A	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200			
	DESCRIPTION POWER RELAY WIRING			
DRAWN BY SLS	DATE 07/23/13	FLEX MODEL A		
APPROVED:	REV DATE	DO NOT SCALE DRAWING		
MD	SIZE	QTY/MACHINE	PART NUMBER	
DOC REV	A	N/A	N/A	ALL 17-57XX MODELS
	SCALE	N/A	SHEET 7	OF 25

VOLTAGE REGULATOR



UPGRADED VOLTAGE REGULATOR

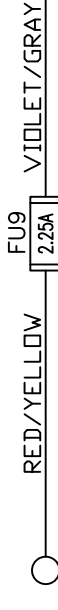


MATERIAL N/A	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (889) 734-0200			
	DESCRIPTION VOLTAGE REGULATOR WIRING			
	FLEX MODEL A DO NOT SCALE DRAWING			
DRAWN BY SLS	DATE 07/23/13	SIZE A	QTY/MACHINE N/A	REV N/A
APPROVED: MD	REV DATE	SCALE N/A	SHEET 8	OF 25

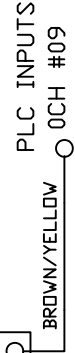
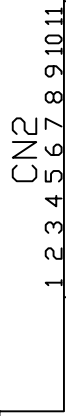
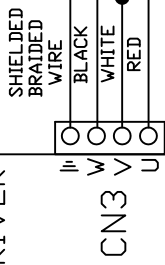
OIL PUMP
MOTOR



KEGEL P/N
154-1266



OIL PUMP MOTOR DRIVER

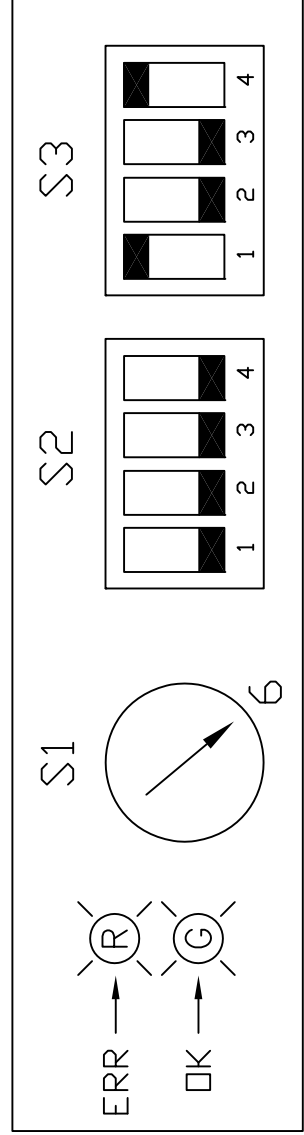


OIL HEAD

DRIVER CN2 #11

PLC OUTPUTS

CH100 #00



MATERIAL
N/A

THE KEGEL CO.
1951 LONGLEAF BLVD.
LAKE WALES, FL 33859
(888) 734-0200

DESCRIPTION
OIL PUMP DRIVER & MOTOR WIRING
FLEX MODEL A
DO NOT SCALE DRAWING

SIZE	QTY/MACHINE	PART NUMBER
A	N/A	ALL 17-57XX MODELS
SCALE	N/A	SHEET 9 OF 25

OIL HEAD MOTOR

KEGEL P/N
154-1266

JUMPED FROM
OIL PUMP
FUSE

FU9
2.25A

RED/YELLOW

WHITE/RED

PL4-10

TB1-9

BLACK

PL4-11

BLACK

OIL HEAD DRIVER

24VDC

0VDC

CN1

CN3

1 2 3 4 5 6 7 8 9 10 11

BROWN 22AWG

YELLOW 22AWG

WHITE

BLACK

BROWN/YELLOW

PL5-8

BROWN/YELLOW

OIL PUMP MOTOR
DRIVER CN2 #10

PLC OUTPUTS
CH100 #05

PLC OUTPUTS
CH100 #04

YELLOW/BLACK

1 2 3

WHITE

RED/ORANGE

RED

SHIELDED WIRE

SHIELDED WIRE

SHIELDED
BRAIDED
WIRE

BLACK

WHITE

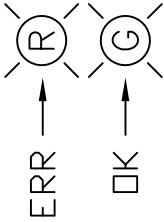
RED

SHIELDED WIRE

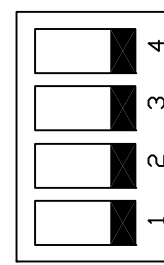
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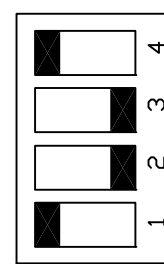
S1



S2



S3



MATERIAL
N/A

DRAWN BY
SLS

DATE
07/23/13

APPROVED:
MD

DOC
REV

THE KEGEL CO. (689) 734-0200
1951 LONGLEAF BLVD.
LAKE WALES, FL 33859

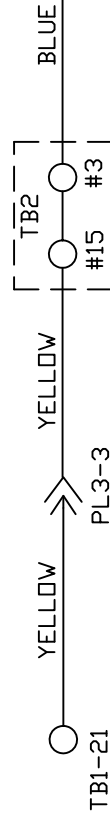
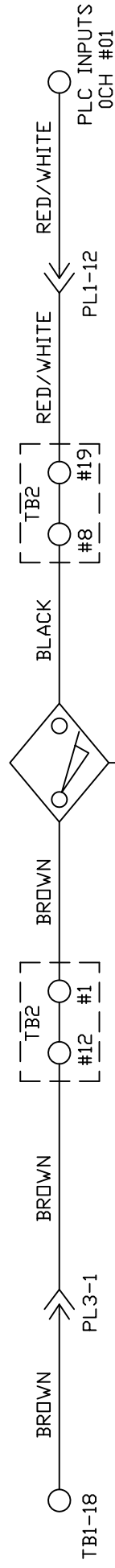
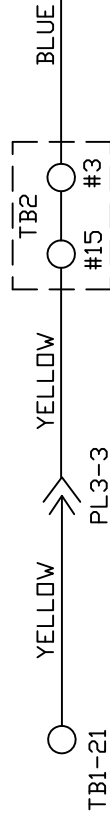
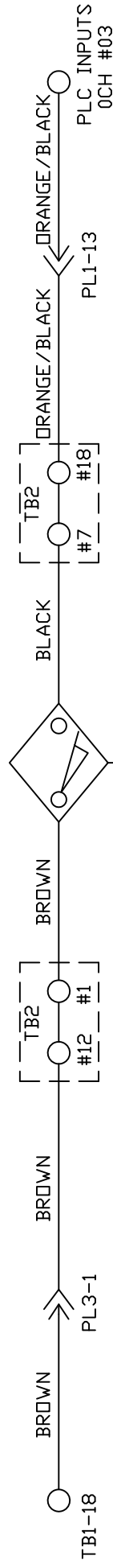
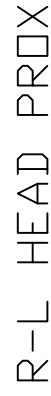
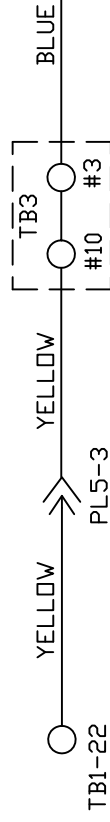
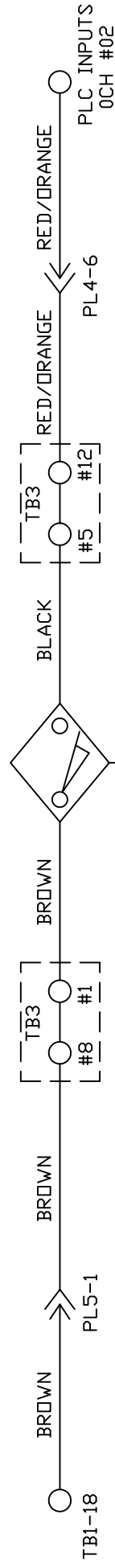
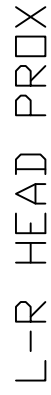
DESCRIPTION

OIL HEAD DRIVER & MOTOR WIRING
FLEX MODEL A
DO NOT SCALE DRAWING

SIZE QTY/MACHINE PART NUMBER

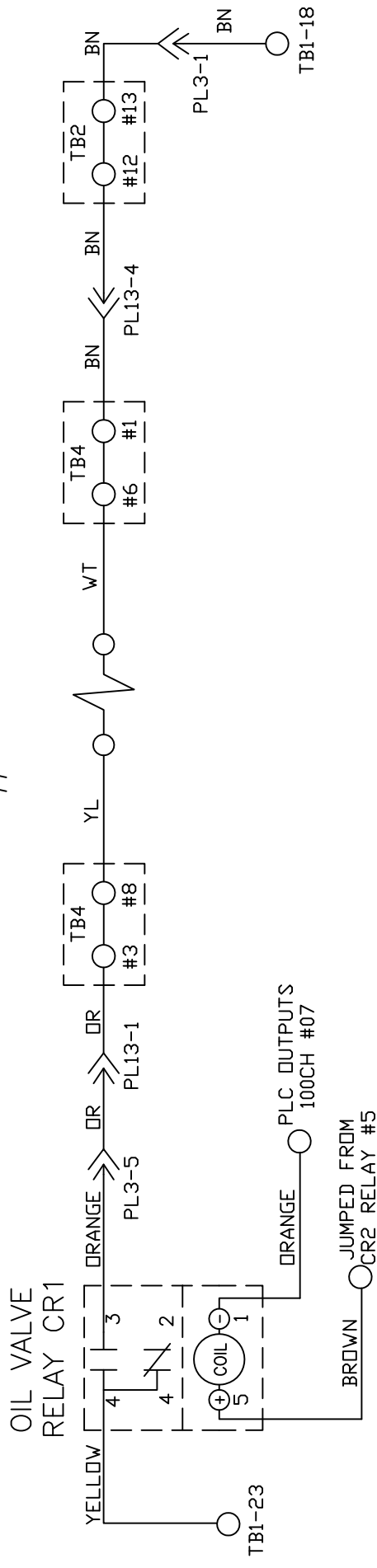
A N/A ALL 17-57XX MODELS

SCALE N/A SHEET 10 OF 25

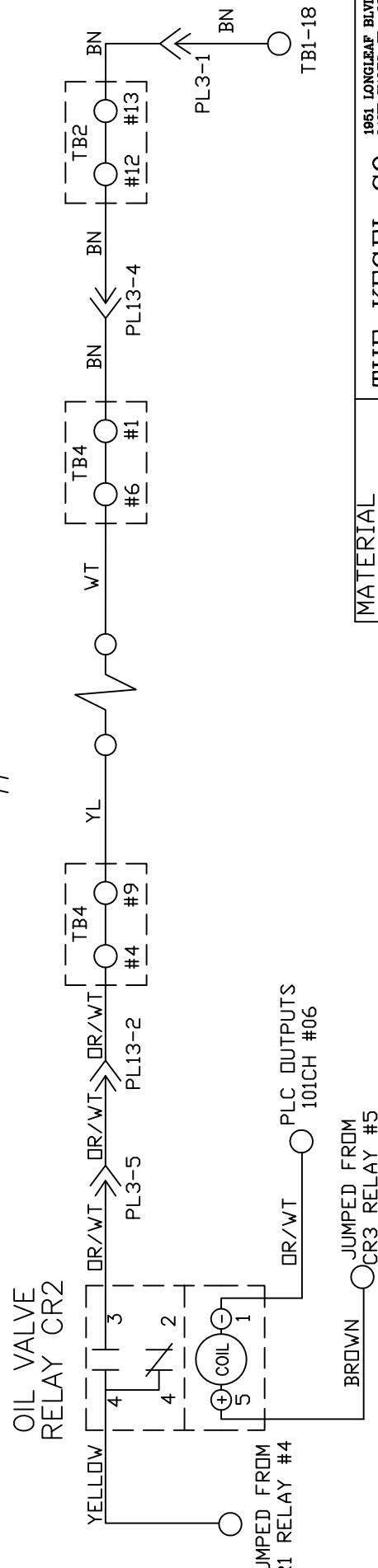


MATERIAL		THE KEGEL CO.				1951 LONGLEAF BLVD. LAKE WALES, FL 33865	
N/A		DESCRIPTION				(863) 734-0200	
DRAWN BY		DATE		L-R, R-L & BOARD PROX WIRING			
SLS		07/23/13		FLEX MODEL A			
APPROVED:		REV DATE		DO NOT SCALE DRAWING			
MD				SIZE	QTY/MACHINE	PART NUMBER	
				A	N/A	ALL 17-57XX MODELS	
DOC				SCALE	N/A	SHEET	11 OF 25
REV							

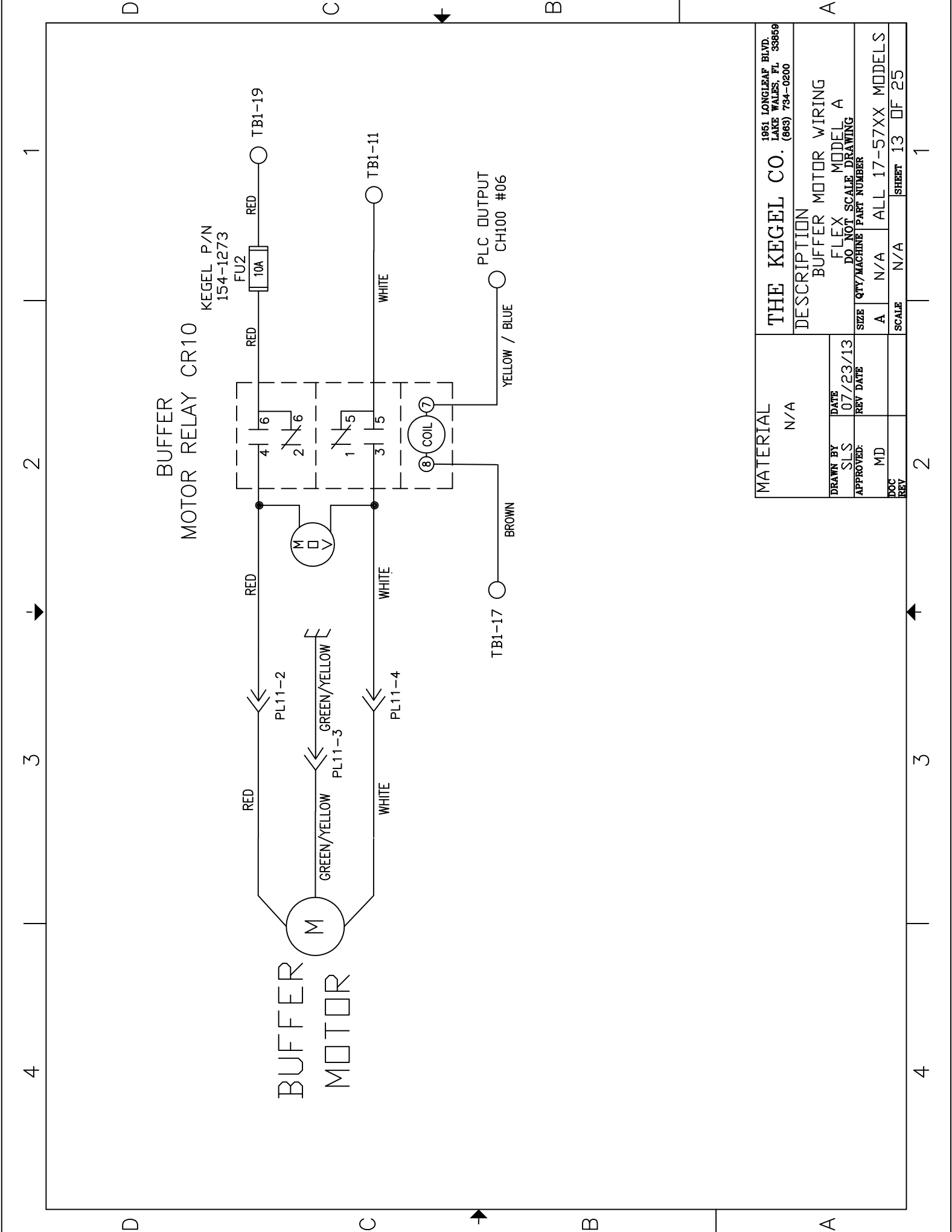
OIL VALVE #1 - TANK A



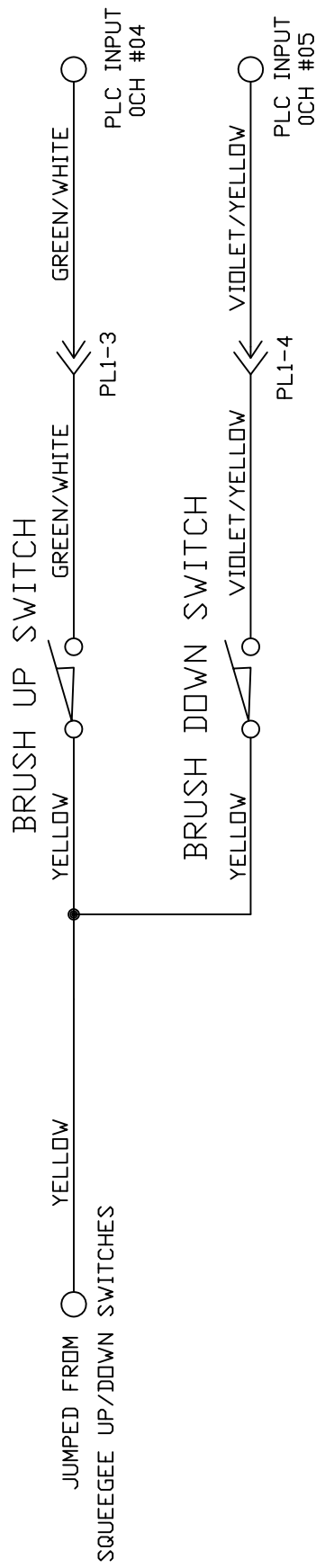
OIL VALVE #2 - TANK B



MATERIAL	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200		
	DESCRIPTION OIL VALVES RELAY WIRING		
	DRAWN BY SLS	DATE 07/23/13	FLEX MODEL A
	APPROVED: MD	REV DATE	DO NOT SCALE DRAWING
SIZE		QTY/MACHINE	PART NUMBER
A		N/A	ALL 17-57XX MODELS
SCALE		N/A	SHEET 12 OF 25



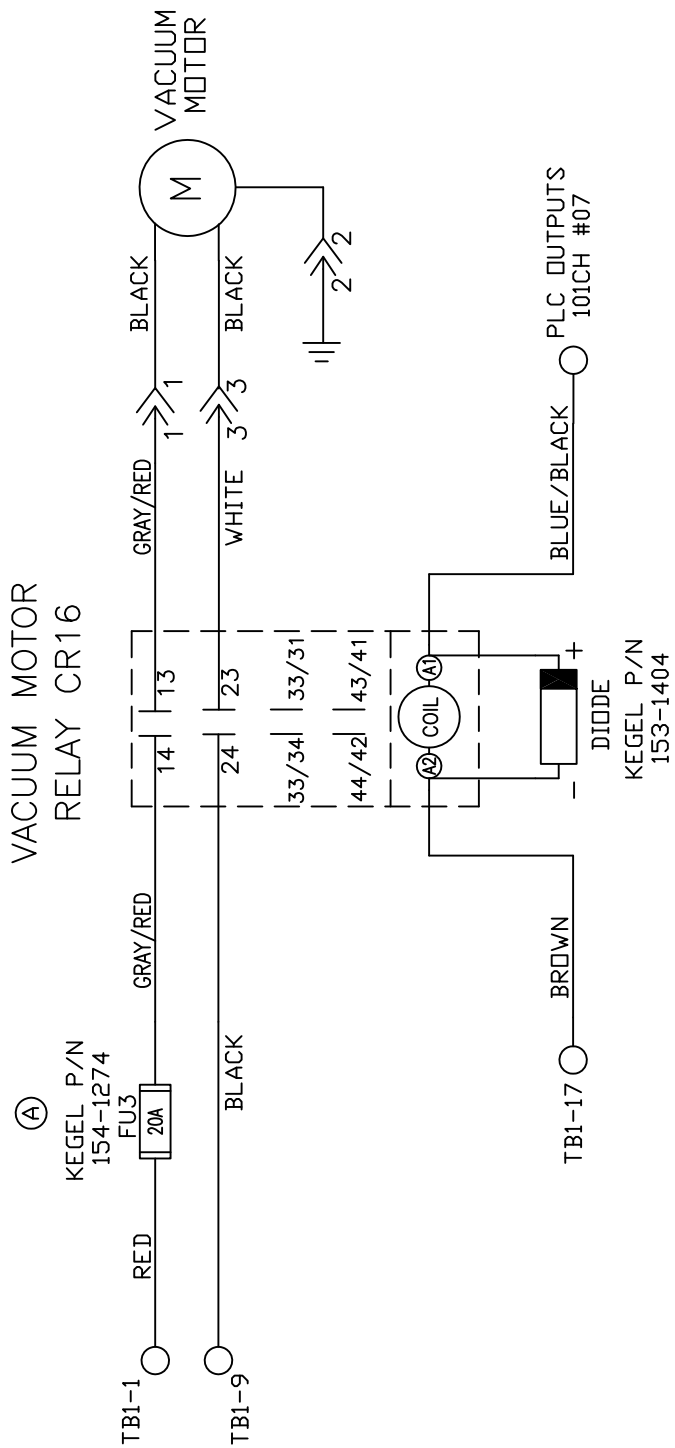
MATERIAL N/A	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200		
	DESCRIPTION BUFFER MOTOR WIRING		
	FLEX MODEL A DO NOT SCALE DRAWING		
DRAWN BY SLS	DATE 07/23/13	SIZE A	QTY/MACHINE PART NUMBER N/A
APPROVED: MD	REV DATE	SCALE N/A	SHEET 13 OF 25
DOC REV			



MATERIAL		N/A		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (863) 734-0200	
DESCRIPTION		BRUSH LIFT MOTOR / SWITCH WIRING			
DRAWN BY		DATE		FLEX MODEL A	
SLS		07/23/13		DO NOT SCALE DRAWING	
APPROVED:		REV DATE		SIZE QTY/MACHINE PART NUMBER	
MD				A N/A ALL 17-57XX MODELS	
DOC		SCALE		N/A	
REV		SHEET		15 OF 25	

4 3 2 1

REV	LTR	DATE	DESCRIPTION
A		02/28/14	CHANGED FUSE FROM MDA TO MDL E/C# 14134

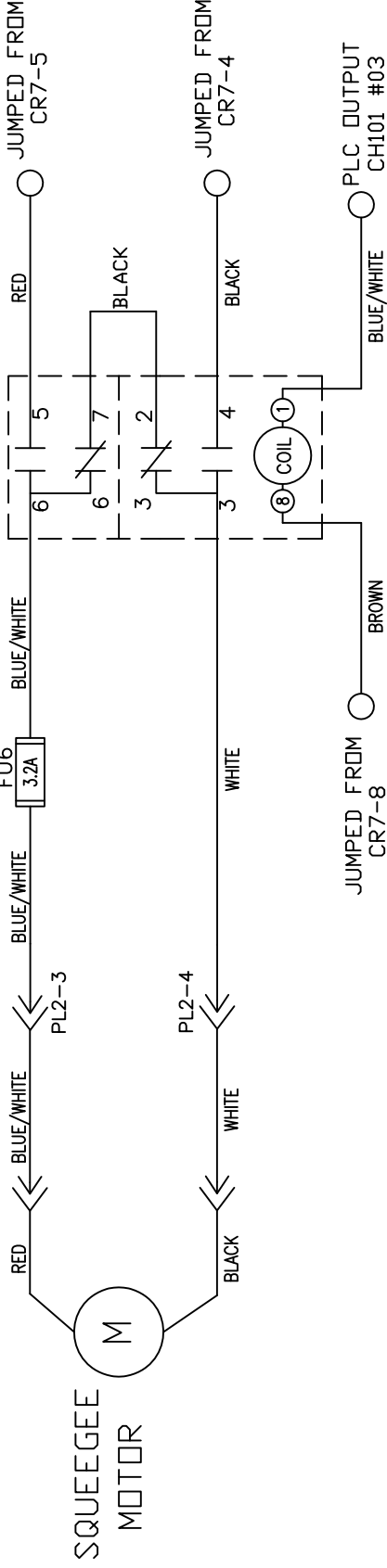


MATERIAL N/A	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200		
	DESCRIPTION VACUUM MOTOR WIRING		
	FLEX MODEL A DO NOT SCALE DRAWING		
DRAWN BY SLS	DATE 07/23/13	SIZE A	QTY/MACHINE PART NUMBER N/A
APPROVED: MD	REV DATE 02/28/14	SCALE N/A	SHEET 16 OF 25

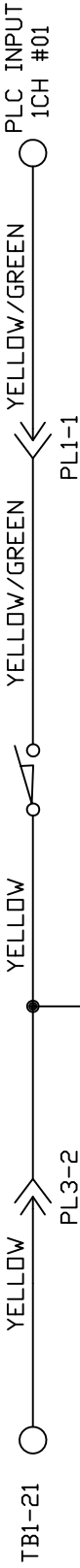
4 3 2 1

SQUEEGEE
MOTOR RELAY CR6

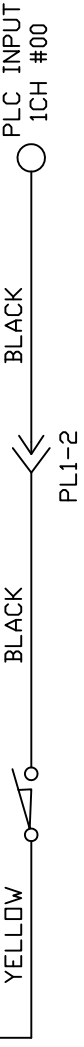
KEGEL P/N
154-1267
FU6
3.2A



SQUEEGEE UP SWITCH

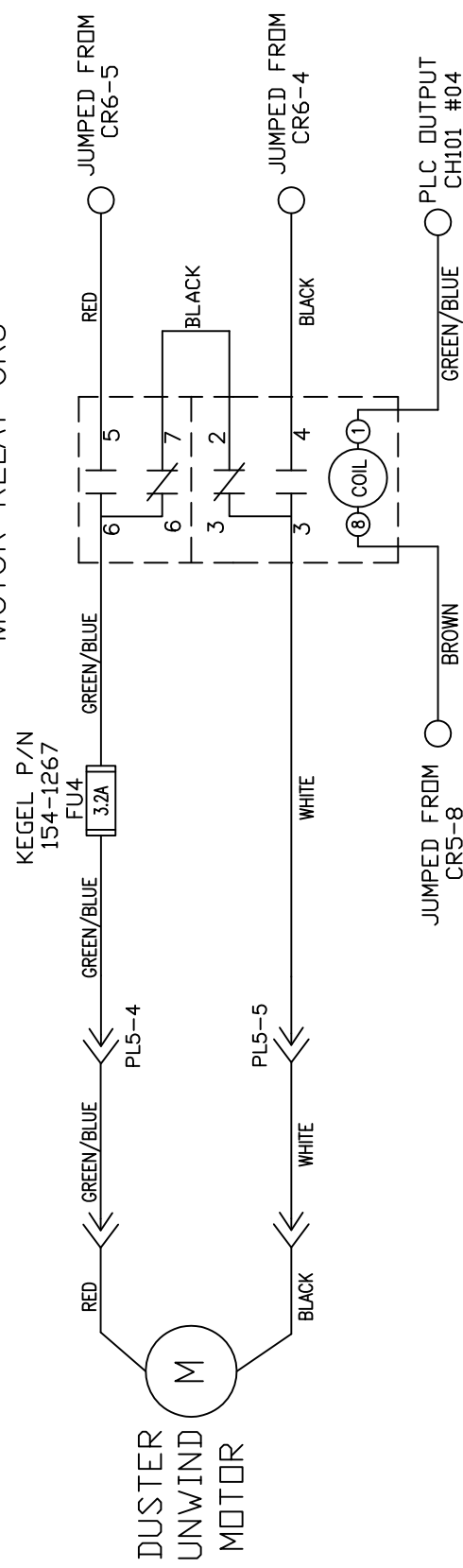


SQUEEGEE DOWN SWITCH

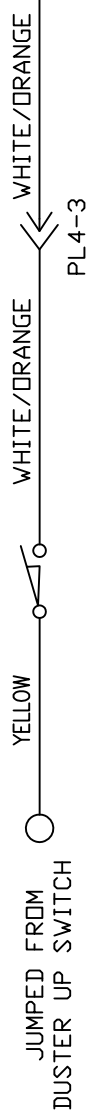


MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
N/A		DESCRIPTION		SQUEEGEE MOTOR & SWITCH WIRING	
DRAWN BY	DATE	FLEX MODEL A		DO NOT SCALE DRAWING	
SLS	07/23/13	SIZE		QTY/MACHINE PART NUMBER	
APPROVED:	REV DATE	A		N/A	
MD		SCALE		N/A	
DOC		ALL 17-57XX MODELS		SHEET 17 OF 25	
REV					

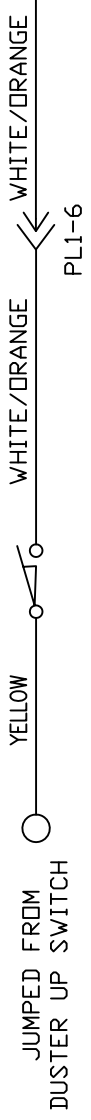
DUSTER UNWIND
MOTOR RELAY CR5



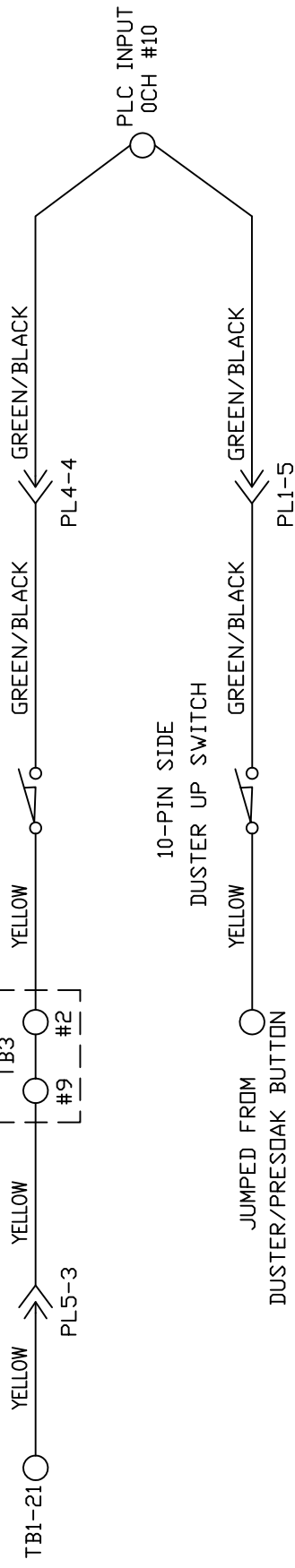
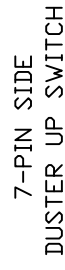
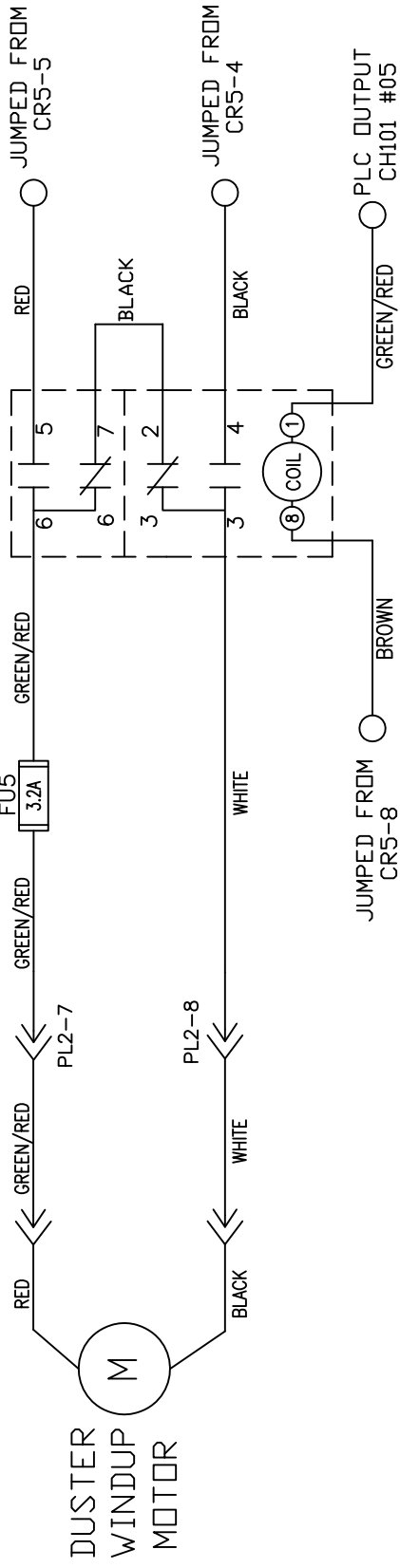
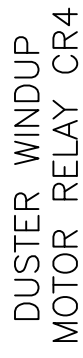
7-PIN SIDE
FAIL SAFE SWITCH



10-PIN SIDE
FAIL SAFE SWITCH

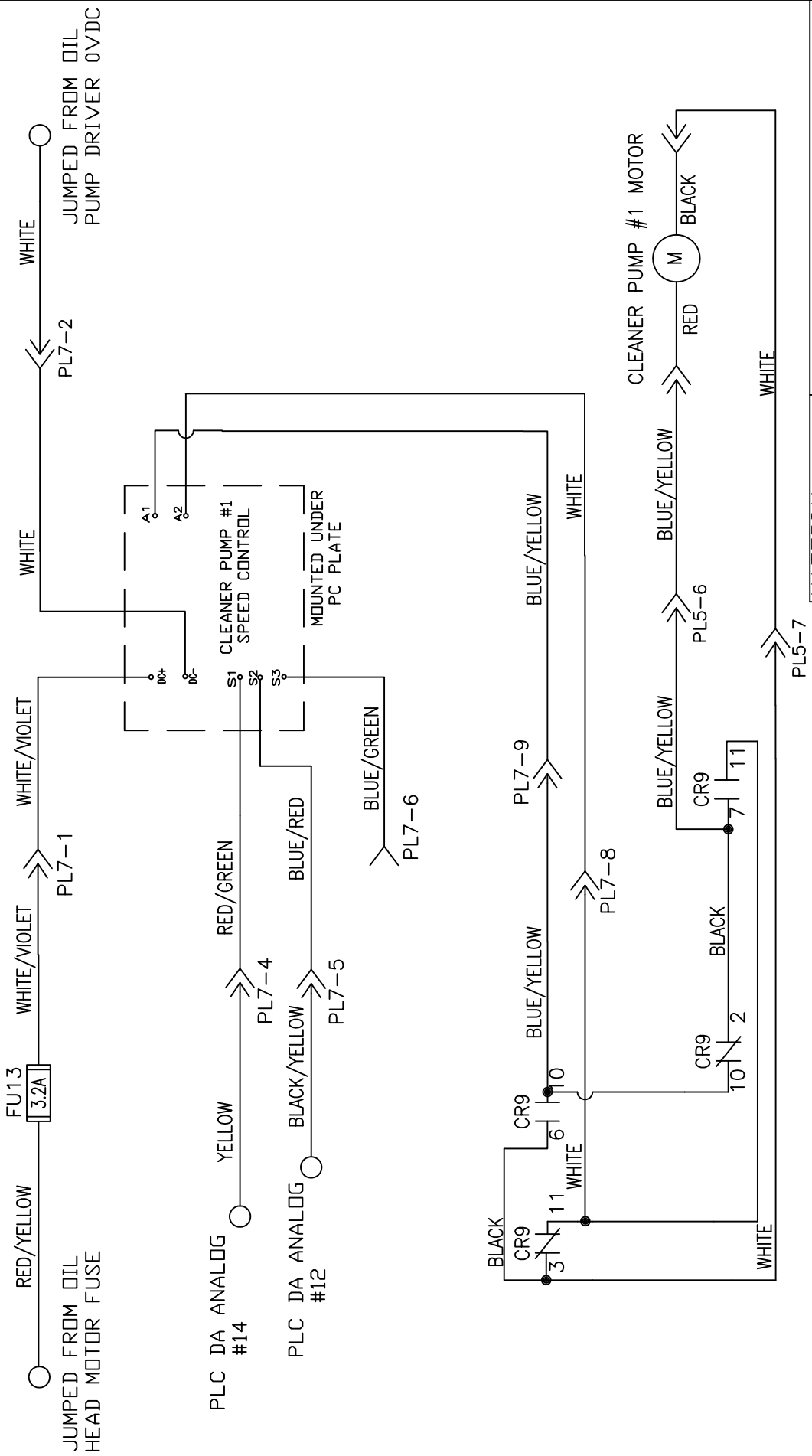


MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
N/A		DESCRIPTION		DUSTER UNWIND / SWITCH WIRING	
DRAWN BY	DATE	FLEX MODEL A		DO NOT SCALE DRAWING	
SLS	07/23/13	SIZE		QTY/MACHINE PART NUMBER	
APPROVED:	REV DATE	A		N/A	
MD		ALL 17-57XX MODELS		SCALE N/A	
DOC		SHEET 18		OF 25	
REV					



MATERIAL		THE KEGEL CO.				1951 LONGLEAF BLVD. LAKE WALES, FL. 33369	
N/A		DESCRIPTION				(863) 734-0200	
DUSTER WINDUP / SWITCH WIRING							
DRAWN BY		DATE		FLEX MODEL A			
APPROVED:		07/23/13		DO NOT SCALE DRAWING			
MD		REV DATE		SIZE		QTY/MACHINE PART NUMBER	
				A		N/A	
DOC				SCALE		N/A	
REV				SHEET		19 OF 25	

KEGEL P/N
154-1267

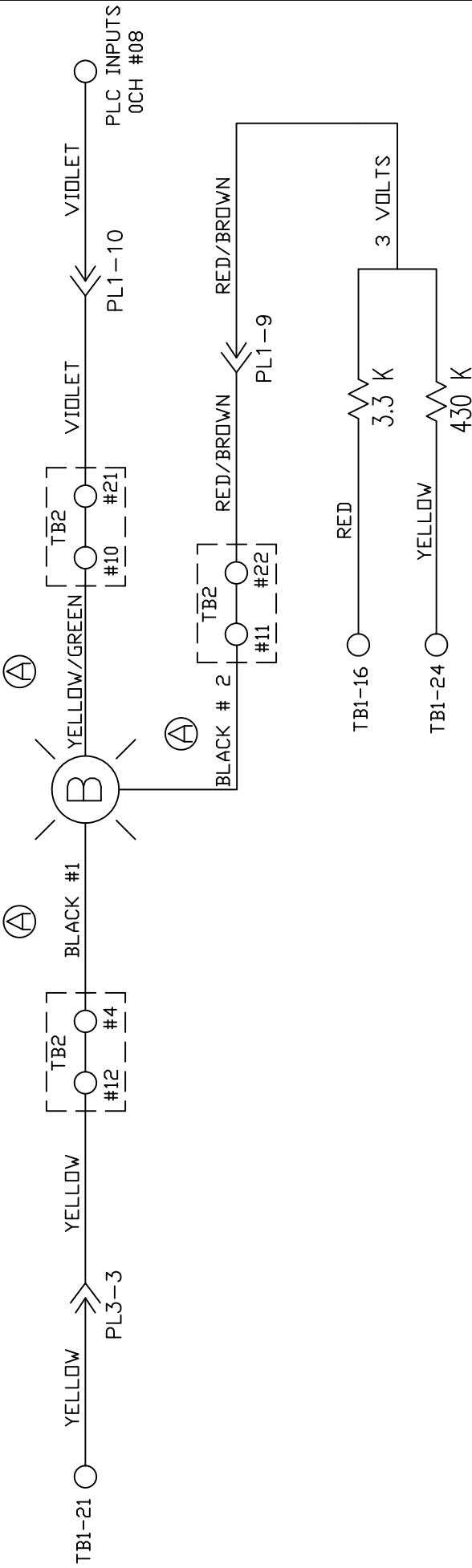


MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		CLEANER PUMP # 1 SPEED CONTROL WIRING	
DRAWN BY SLS	DATE 07/23/13	FLEX MODEL A		DO NOT SCALE DRAWING	
APPROVED:	REV DATE	SIZE	QTY/MACHINE	PART NUMBER	
MD		A	N/A	ALL 17-57XX MODELS	
DOC		SCALE	N/A	SHEET	20 OF 25
REV					

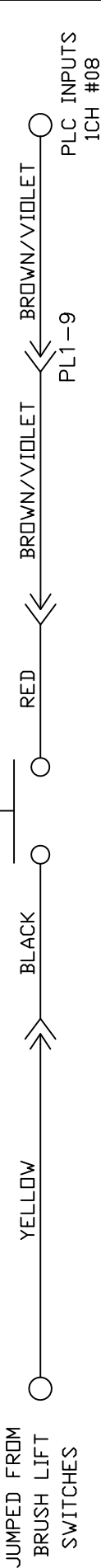
4 3 2 1

START BUTTON

REV	LTR	DATE	DESCRIPTION
A		03/24/14	CHANGED HANDLE WIRE COLORS E/C# 14140



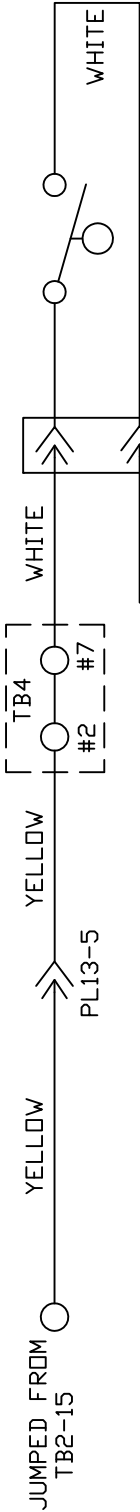
DUSTER/PRESOAK BUTTON



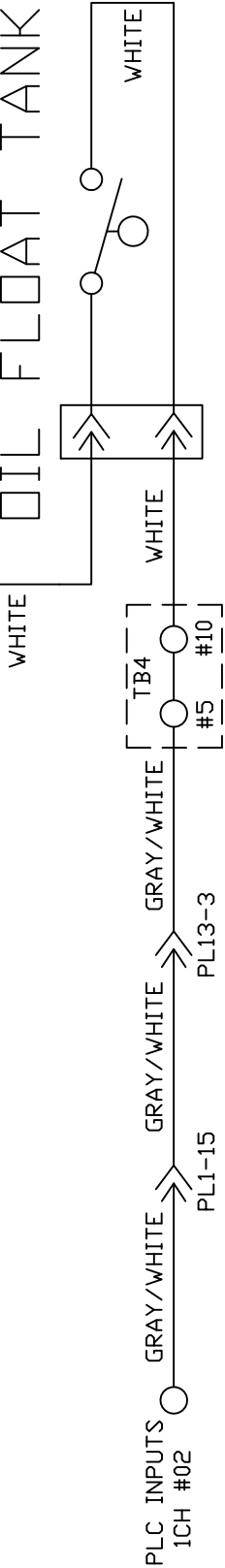
MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
N/A		DESCRIPTION		START BUTTON-DUSTER/PRESOAK BUTTON	
DRAWN BY	DATE	FLEX MODEL A		DO NOT SCALE DRAWING	
SLS	07/23/13	DO NOT SCALE DRAWING		DO NOT SCALE DRAWING	
APPROVED:	REV DATE	SIZE		QTY/MACHINE PART NUMBER	
MD	03/24/14	A		N/A	
DOC	REV	SCALE		N/A	
A	2	SHEET		22 OF 25	

4 3 2 1

OIL FLOAT TANK A



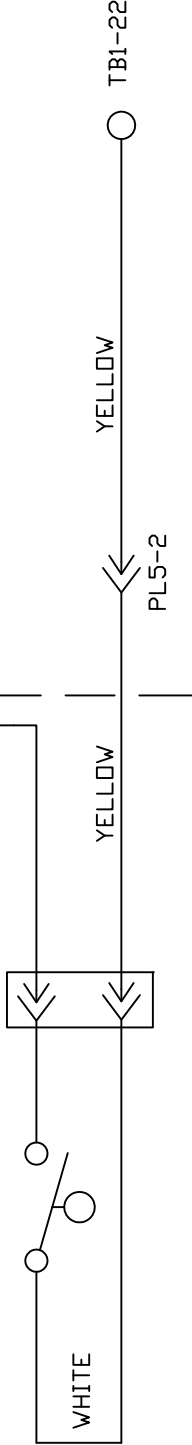
OIL FLOAT TANK B



CLEANER FLOAT PUMP #1



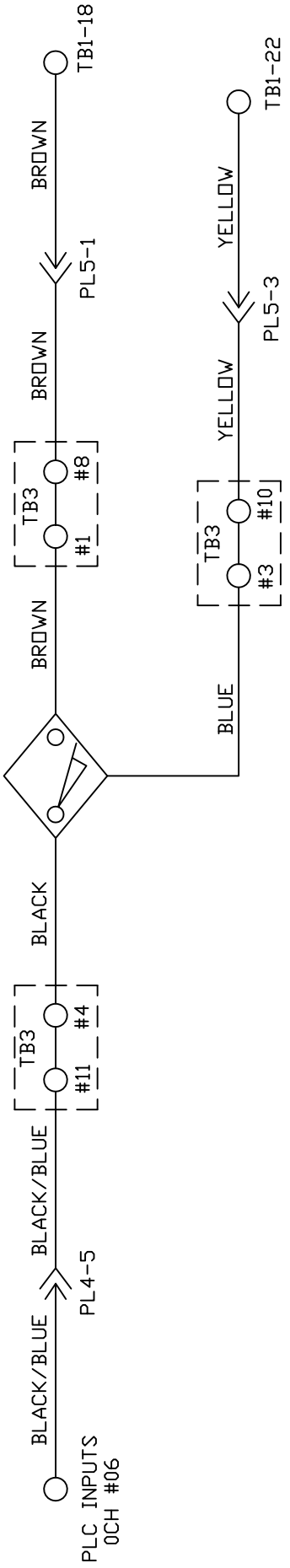
CLEANER FLOAT PUMP #2



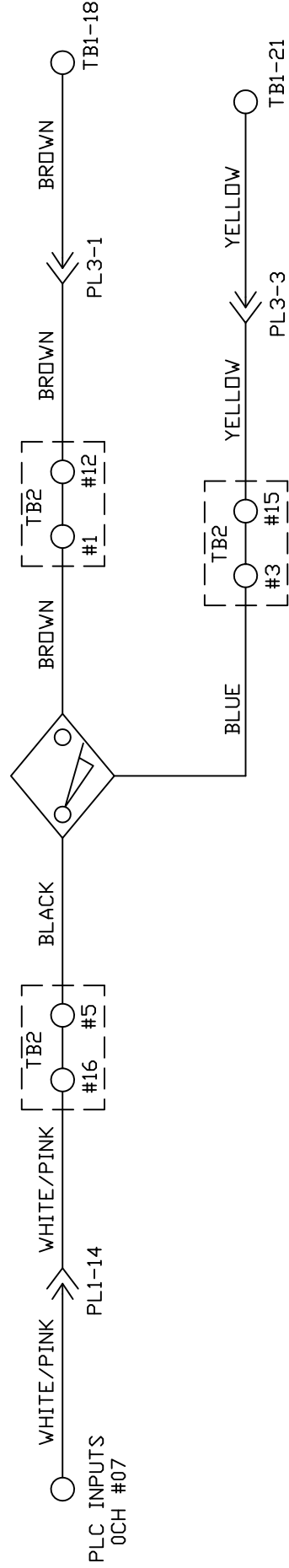
OPTIONAL CLEANER UPGRADE

MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		OIL FLOATS & CLEANER FLOATS WIRING	
DRAWN BY	DATE	FLEX MODEL A		DO NOT SCALE DRAWING	
SLS	07/23/13	SIZE		QTY/MACHINE PART NUMBER	
APPROVED:	REV DATE	A	N/A	ALL 17-57XX MODELS	
MD		SCALE	N/A	SHEET 23 OF 25	
DOC					
REV					

SPEED TACH PROX



LANE DISTANCE PROX



MATERIAL N/A	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200			
	DESCRIPTION SPEED TACH / LANE DISTANCE WIRING			
	FLEX MODEL A DO NOT SCALE DRAWING			
DRAWN BY SLS	DATE 07/23/13	SIZE A	QTY/MACHINE N/A	SCALE N/A
APPROVED:	REV DATE	MD	ALL 17-57XX MODELS	SHEET 24 OF 25
DOC REV				

TB1-15

KEGEL P/N
155-1229
FU16
1A

PL4-12

RED/GREEN

RED/GREEN

YELLOW/WHITE

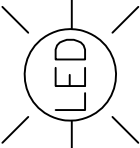
YELLOW

YELLOW

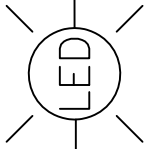
YELLOW

TB3-2

LED TANK
LIGHT SWITCH



LED ARROW
LIGHT



RED/GREEN

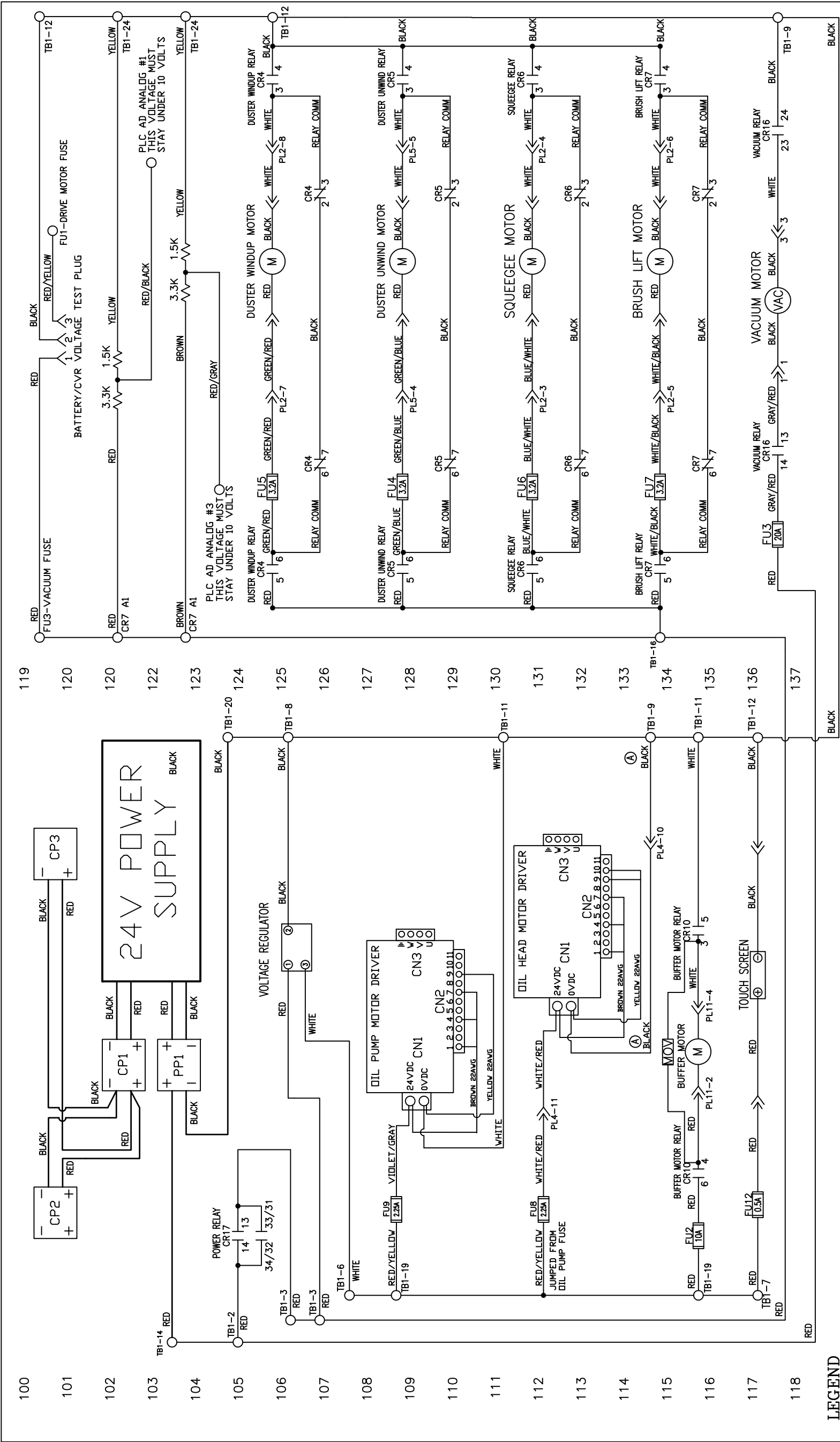
YELLOW

MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		LED TANK LIGHT WIRING	
DRAWN BY	DATE	FLEX MODEL A		DO NOT SCALE DRAWING	
SLS	07/23/13	SIZE		QTY/MACHINE PART NUMBER	
APPROVED:	REV DATE	A	N/A	ALL 17-57XX MODELS	
MD		SCALE	N/A	SHEET 25 OF 25	
DOC					
REV					

Flex Walker Wiring Diagrams

The following diagrams show wiring schematics for the Kustodian Walker. Detailed diagrams for the Ion follow this section. If you have any questions please call 863-734-0200 or email tech@kegel.net .

Flex Walker Motor Wiring Layout	261
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LEGEND

- CR1 - OIL VALVE RELAY TANK A

CR2 - OIL VALVE RELAY TANK B

CR3 - POWER OFF RELAY

CR4 - DUSTER WINDUP MOTOR RELAY

CR5 - DUSTER UNWIND MOTOR RELAY

CR6 - SQUEEGEE LIFT MOTOR RELAY

CR7 - BRUSH LIFT MOTOR RELAY

CR8 - FORWARD DRIVE MOTOR RELAY

CR9 - REVERSE DRIVE MOTOR RELAY

CR10 - BUFFER MOTOR RELAY

CR11 - WHISKER ENABLE RELAY

CR12 - WHISKER 7 PIN SIDE RELAY

CR13 - WHISKER 10 PIN SIDE RELAY

CR14 - ZTR ENABLE RELAY

CR15 - ZTR REVERSE RELAY

CR16 - VACUUM MOTOR RELAY

CR17 - POWER RELAY
- FU1 - DRIVE MOTOR 7.5A

FU2 - BUFFER MOTOR 10A/20A

FU3 - VACUUM MOTOR 20A

FU4 - DUSTER UNWIND 3.2A

FU5 - DUSTER WINDUP 3.2A

FU6 - SQUEEGEE LIFT MOTOR 3.2A

FU7 - BRUSH LIFT MOTOR 3.2A

FU8 - HEAD DRIVE MOTOR 2.25A

FU9 - OIL PUMP MOTOR 2.25A

FU10 - PLC INPUT POWER/L1 0.5A

FU11 - WHISKER 7 PIN SIDE RELAY

FU12 - TOUCH SCREEN 0.5A

FU13 - CLEANER PUMP #1 3.2A

FU14 - CLEANER PUMP #2 3.2A

FU15 - CVR POWER 25A/30A

FU16 - LED LIGHTS 1A

CP1 - CHARGING PLUG (BLUE)

CP2 - CHARGING PLUG (BLUE)

PP1 - POWER PLUG (RED)
- PL1 - 10-PIN SIDE PLUG (15)

PL2 - 10-PIN SIDE PLUG (12)

PL3 - 10-PIN SIDE PLUG (9)

PL4 - 7-PIN SIDE PLUG (12)

PL5 - 7-PIN SIDE PLUG (9)

PL6 - DRIVE SPEED BOARD PLUG (12)

PL7 - CLEANER PUMP #1 SPEED BOARD PLUG (9)

PL8 - CLEANER PUMP #2 SPEED BOARD PLUG (9)

PL9 - ZTR DRIVE MOTOR PLUG (3)

PL10 - BUFFER SPEED BOARD PLUG (12)

PL11 - BUFFER MOTOR PLUG (5)

PL12 - BUFFER MOTOR VARIABLE SPEED PLUG (5)

PL13 - OIL PLATE ASSEMBLY PLUG (6)
- TB1 - TERMINAL BLOCK 1 (MAIN)

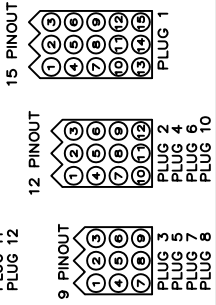
TB2 - TERMINAL BLOCK 2 (10-PIN SIDE)

TB3 - TERMINAL BLOCK 3 (7-PIN SIDE)

TB4 - TERMINAL BLOCK 4 (OIL PLATE)

TB5 - TERMINAL BLOCK 5 (TOP PLC PLATE)

VIEW OF PLUGS FROM CONTROLLER



REV	LTR	DATE	DESCRIPTION
A		01/02/14	CHANGED WHITE WIRE TO BLACK E/C# 14101
MATERIAL			
N/A			
DESCRIPTION			
MOTOR WIRING SCHEMATIC			
FLEX WALKER MODEL A			
DRAWN BY	SLS	DATE	07/23/13
APPROVED:	MD	REV DATE	01/02/14
DOC REV	A	SIZE	C
		QTY/MACHINE	N/A
		SCALE	N/A
		SHEET	1
		OF	27

1961 LONGLEAF BLVD.
LAKE WALES, FL 33859
(863) 734-0200

OMRON
SYSMAC
CP1H
OUTPUTS

200

201

202

203

204

205

206

207

208

209

210

211

11

740

000

1

•

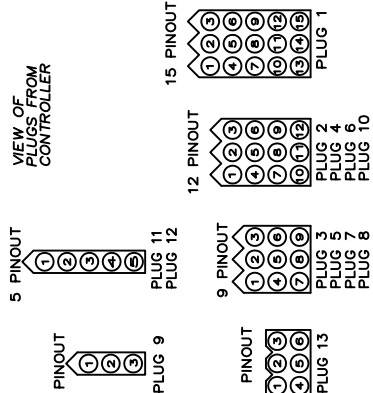
LEGEND

CR1	-	OIL	VALVE	RELAY	TANK A
CR2	-	OIL	VALVE	RELAY	TANK B
CR3	-	POWER	OFF	RELAY	
CR4	-	DUSTER	WINDUP	MOTOR	RELAY
CR5	-	DUSTER	UNWIND	MOTOR	RELAY
CR6	-	SQUEEEEEE	LIFT	MOTOR	RELAY
CR7	-	BRUSH	LIFT	MOTOR	RELAY
CR8	-	FORWARD	DRIVE	MOTOR	RELAY
CR9	-	REVERSE	DRIVE	MOTOR	RELAY
CR10	-	BUFFER	MOTOR	RELAY	
CR11	-	WHISKER	ENABLE	RELAY	
CR12	-	WHISKER	7 PIN	SIDE	RELAY
CR13	-	WHISKER	10 PIN	SIDE	RELAY
CR14	-	ZTR	ENABLE	RELAY	
CR15	-	ZTR	REVERSE	RELAY	
CR16	-	VACUUM	MOTOR	RELAY	
CR17	-	POWER	RELAY		

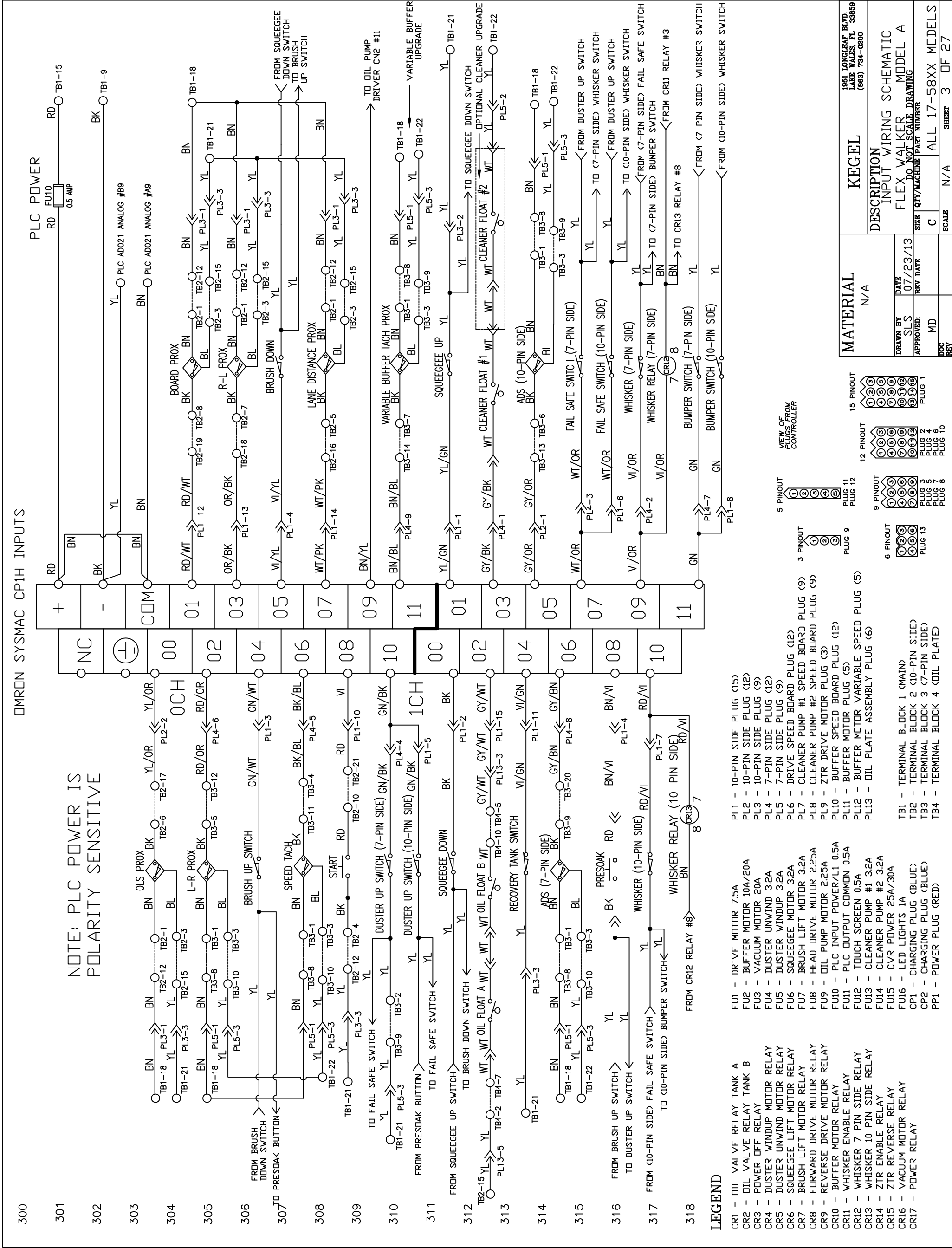
FU1	-	DRIVE MOTOR 7.5A
FU2	-	BUFFER MOTOR 10A/20A
FU3	-	VACUUM MOTOR 20A
FU4	-	DUSTER UNWIND 3.2A
FU5	-	DUSTER WINDUP 3.2A
FU6	-	SQUEEGEE MOTOR 3.2A
FU7	-	BRUSH LIFT MOTOR 3.2A
FU8	-	HEAD DRIVE MOTOR 2.25A
FU9	-	OIL PUMP MOTOR 2.25A
FU10	-	PLC INPUT POWER/L1 0.5A
FU11	-	PLC OUTPUT COMMON 0.5A
FU12	-	TOUCH SCREEN 0.5A
FU13	-	CLEANER PUMP #1 3.2A
FU14	-	CLEANER PUMP #2 3.2A
FU15	-	CVR POWER 25A/30A
FU16	-	LED LIGHTS 1A
CP1	-	CHARGING PLUG (BLUE)
CP2	-	CHARGING PLUG (BLUE)
PP1	-	POWER PLUG (RED)

- PL1 - 10-PIN SIDE PLUG (15)
- PL2 - 10-PIN SIDE PLUG (12)
- PL3 - 10-PIN SIDE PLUG (9)
- PL4 - 7-PIN SIDE PLUG (12)
- PL5 - 7-PIN SIDE PLUG (9)
- PL6 - DRIVE SPEED BOARD PLUG (12)
- PL7 - CLEANER PUMP #1 SPEED BOARD
- PL8 - CLEANER PUMP #2 SPEED BOARD
- PL9 - ZTR DRIVE MOTOR PLUG (3)
- PL10 - BUFFER SPEED BOARD PLUG (12)
- PL11 - BUFFER MOTOR PLUG (5)
- PL12 - BUFFER MOTOR VARIABLE SPEED
- PL13 - OIL PLATE ASSEMBLY PLUG (6)

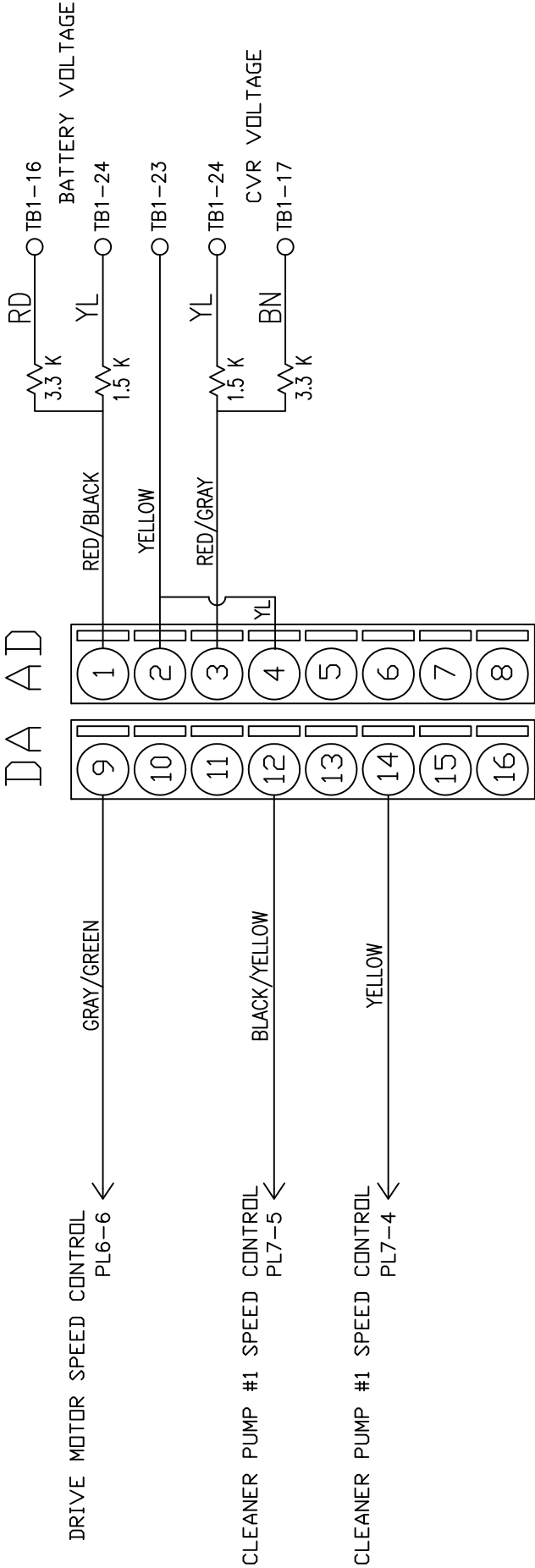
- TB1 - TERMINAL BLOCK 1 (MAIN)
- TB2 - TERMINAL BLOCK 2 (10-PIN SIDE)
- TB3 - TERMINAL BLOCK 3 (7-PIN SIDE)
- TB4 - TERMINAL BLOCK 4 (OIL PLATE)



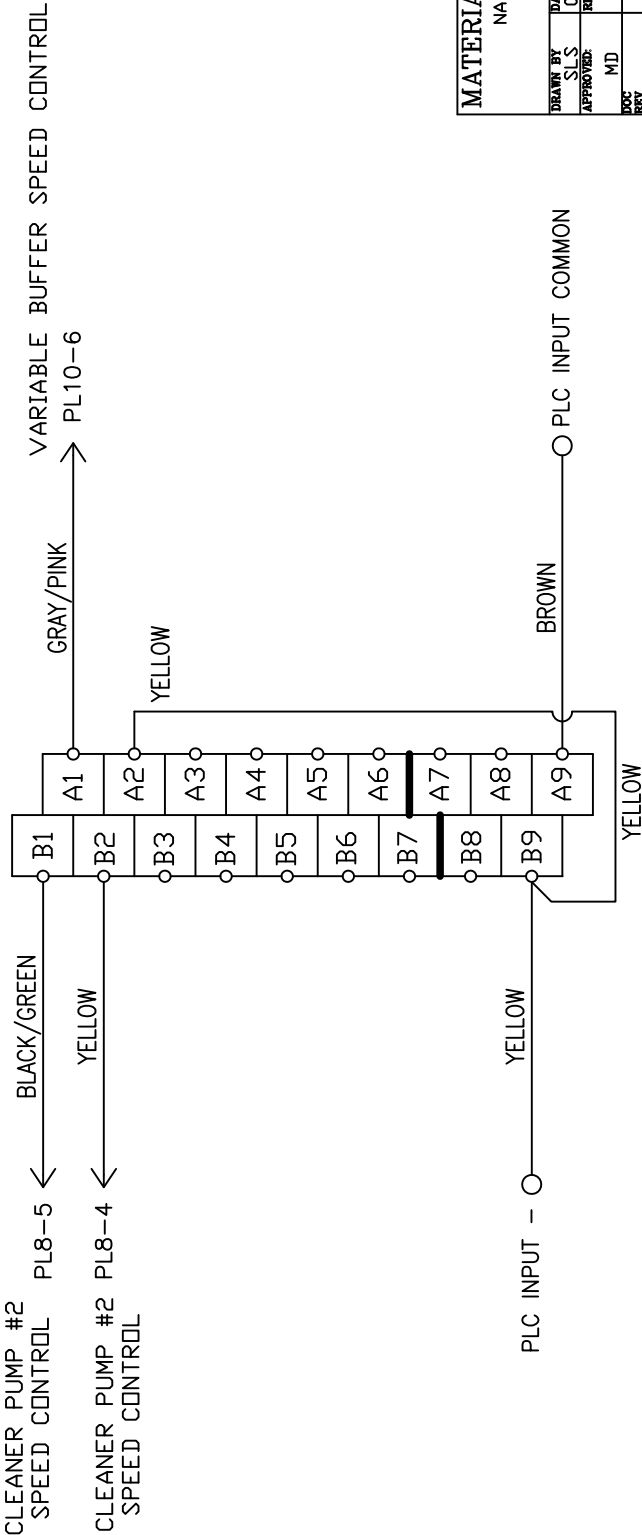
MATERIAL N/A	KEGEL 1951 LONGLEAF BLVD. LAKE WALKER, FL 33859 (863) 734-0200			
	DESCRIPTION OUTPUT WIRING SCHEMATIC FLEX WALKER MODEL A DO NOT SCALE DRAWING			
DRAWN BY SLS	DATE 07/23/13	SIZE QTY/MACHINE PART NUMBER	SCALE N/A	
APPROVED: MD	REV DATE	C N/A	ALL 17-58XX MODELS	SHEET 2 OF 27



BUILT IN PLC ANALOG



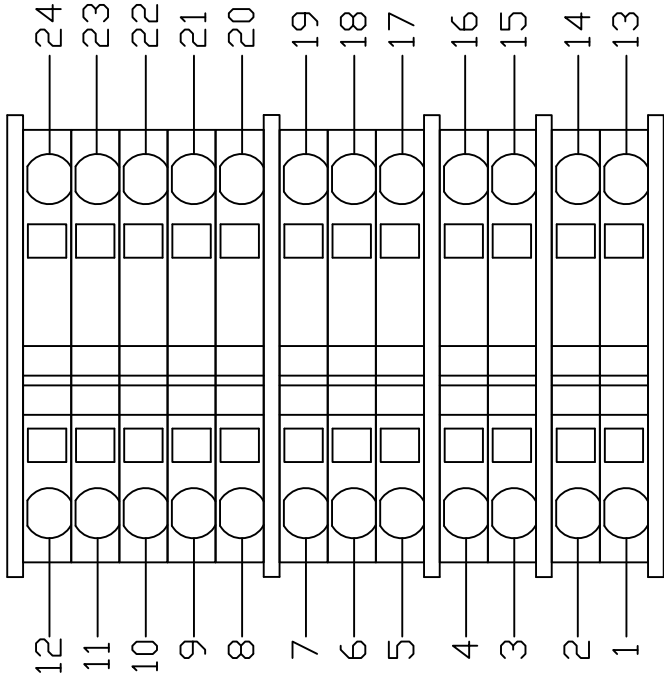
AD021 ANALOG ADD ON UNIT



MATERIAL		KEGEL		1951 LONGLEAP BLVD. LAKE WALKER, FL. 33659 (863) 734-0200			
NA		DESCRIPTION					
		ANALOG WIRING SCHEMATIC					
		FLEX MODEL A					
		DO NOT SCALE DRAWING					
		SIZE QTY/MACHINE PART NUMBER					
		C		ALL 17-58XX MODELS			
		SCALE		N/A		SHEET 5 OF 27	
		REV					

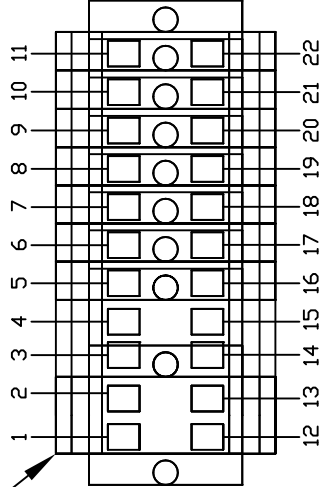
TB1

<MAIN>



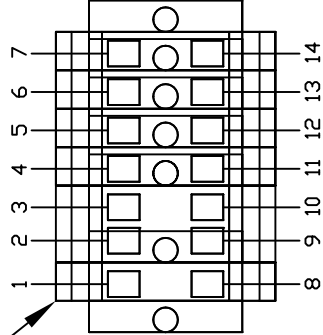
<10-PIN SIDE>

ORANGE
BLOCK



<7-PIN SIDE>

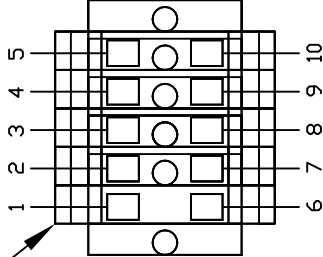
ORANGE
BLOCK



TB4

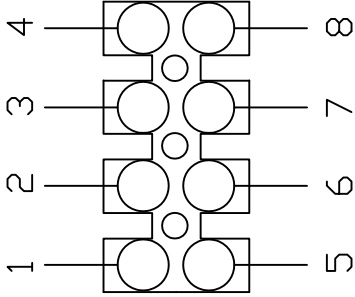
<OIL PLATE>

ORANGE
BLOCK



TB5

<TOP PLC PLATE>

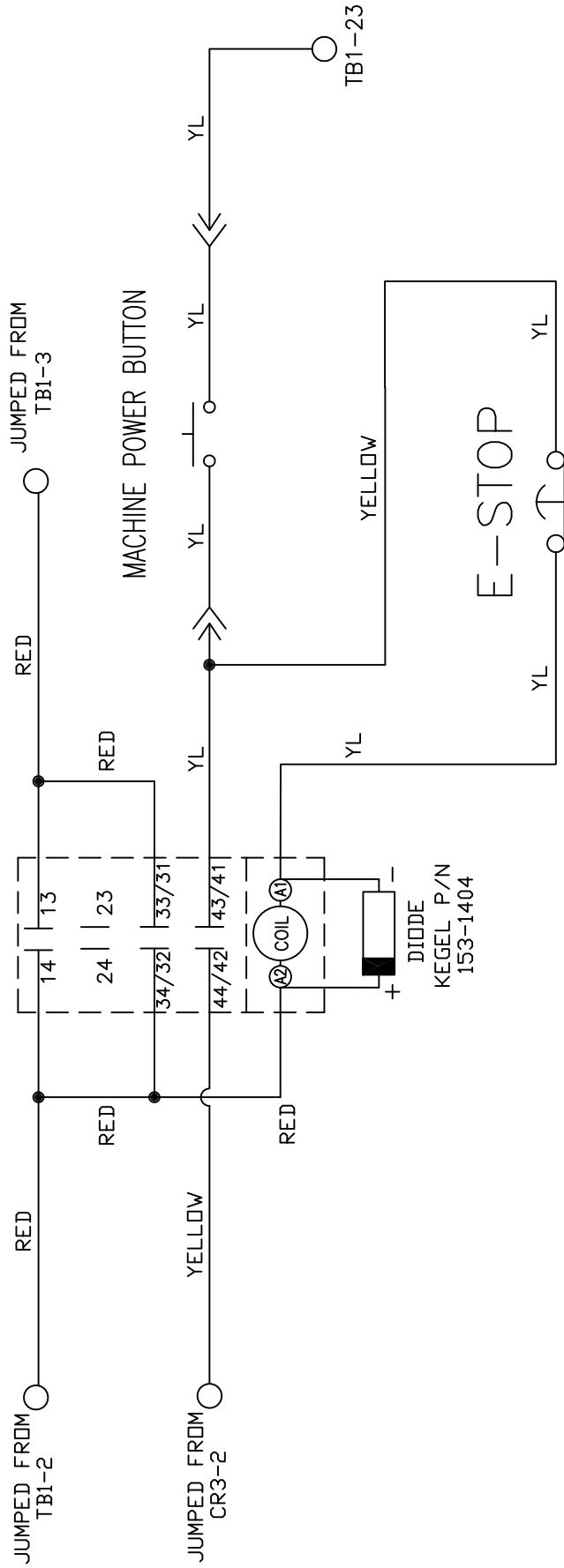


LEGEND

- TB1 - TERMINAL BLOCK 1 <MAIN>
- TB2 - TERMINAL BLOCK 2 <10-PIN SIDE>
- TB3 - TERMINAL BLOCK 3 <7-PIN SIDE>
- TB4 - TERMINAL BLOCK 4 <OIL PLATE>
- TB5 - TERMINAL BLOCK 5 <TOP PLC PLATE>

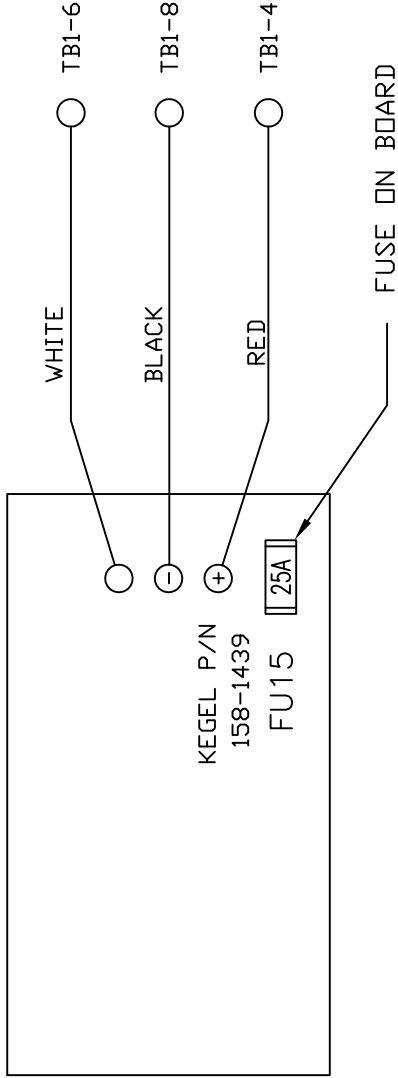
MATERIAL NA	KEGEL		1951 LONGLEAP BLVD. LAKE WALKER, FL 33659 (863) 734-0200	
	DESCRIPTION TERMINAL BLOCK LAYOUT FLEX WALKER MODEL A		DO NOT SCALE DRAWING	
DRAWN BY SLS	DATE 07/23/13	SIZE C	SCALE N/A	REV 6
APPROVED MD	REV DATE	QTY/MACHINE PART NUMBER	ALL 17-58XX MODELS	OF 27

POWER RELAY
CR17

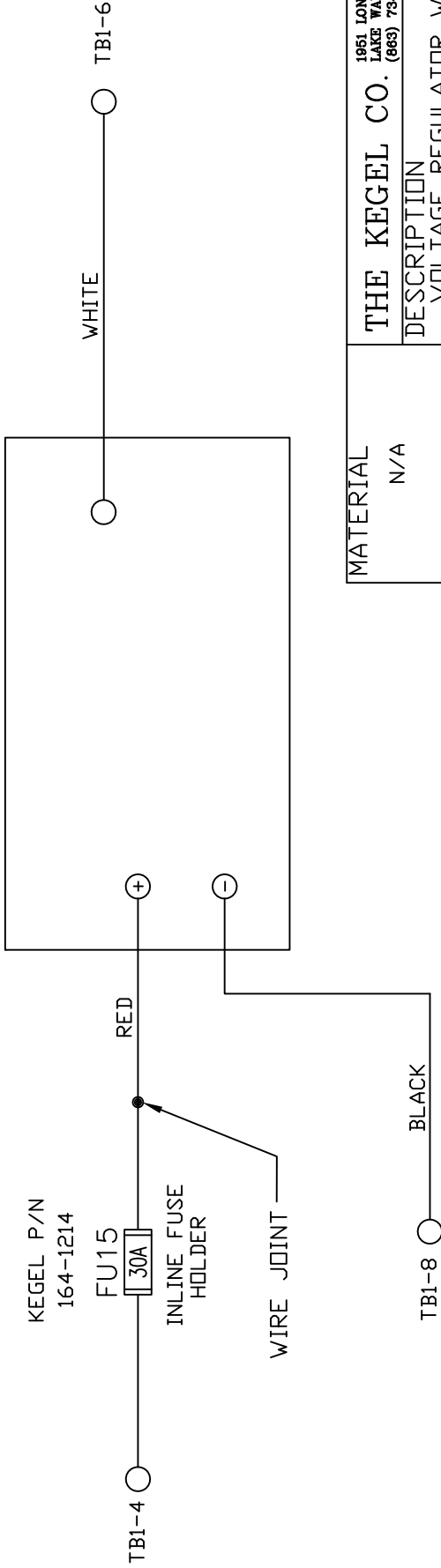


MATERIAL N/A	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200			
	DESCRIPTION POWER RELAY WIRING			
	FLEX WALKER MODEL A DO NOT SCALE DRAWING			
DRAWN BY SLS	DATE 07/23/13	SIZE A	QTY/MACHINE N/A	PART NUMBER ALL 17-58XX MODELS
APPROVED:	REV DATE	SCALE N/A	SHEET 7	OF 27
DOC REV	MD			

VOLTAGE REGULATOR

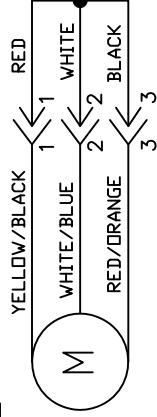


UPGRADED VOLTAGE REGULATOR

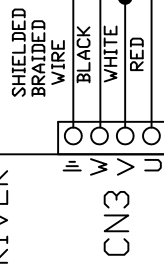
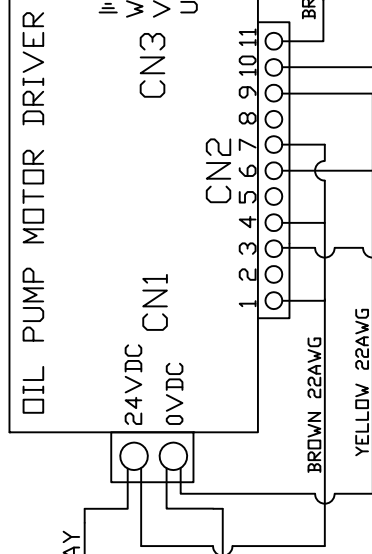
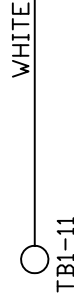
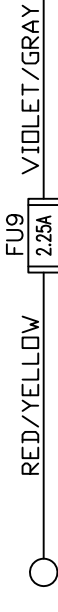


MATERIAL N/A		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (889) 734-0200	
		DESCRIPTION VOLTAGE REGULATOR WIRING FLEX WALKER MODEL A DO NOT SCALE DRAWING	
DRAWN BY SLS	DATE 07/23/13	SIZE A	QTY/MACHINE PART NUMBER N/A
APPROVED: MD	REV DATE	SCALE N/A	SHEET 8 OF 27
DOC REV			

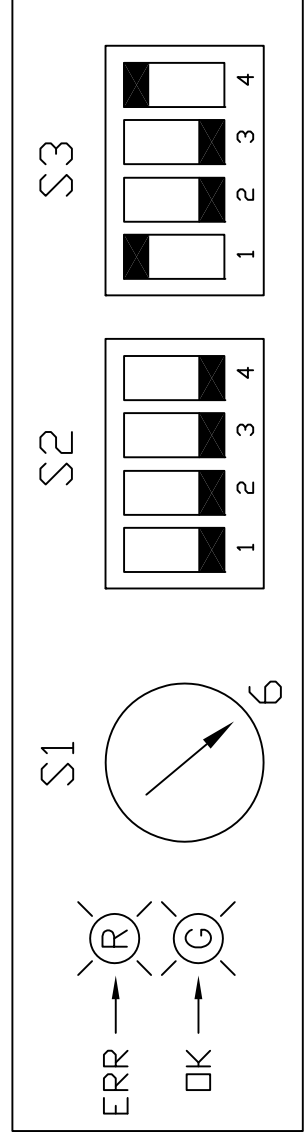
OIL PUMP MOTOR



KEGEL P/N
154-1266



PL5-8



MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		OIL PUMP DRIVER & MOTOR WIRING	
DRAWN BY SLS		DATE 07/23/13		FLEX WALKER MODEL A	
APPROVED: MD		REV DATE		DO NOT SCALE DRAWING	
DOC REV		SIZE A		QTY/MACHINE PART NUMBER	
		SCALE N/A		ALL 17-58XX MODELS	
		SHEET 9		OF 27	

OIL HEAD MOTOR

KEGEL P/N
154-1266

JUMPED FROM
OIL PUMP
FUSE

FU9

RED/YELLOW

WHITE/RED

PL4-10

BLACK

PL4-11

TB1-9

OIL HEAD DRIVER

24VDC

0VDC

CN1

CN3

CN2

BROWN 22AWG

YELLOW 22AWG

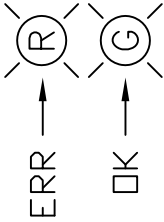
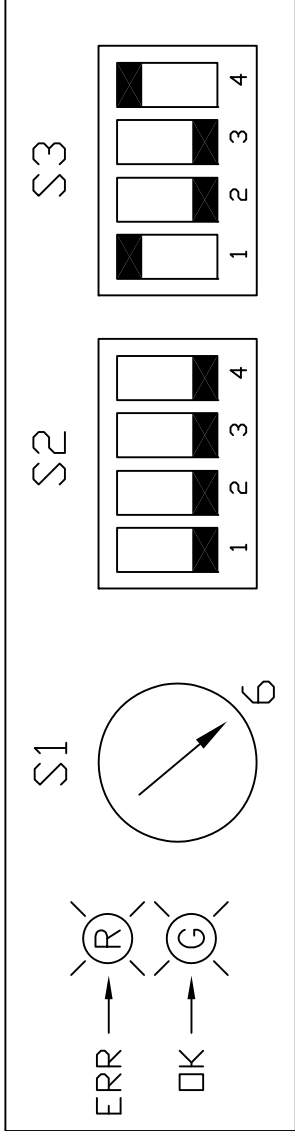
BROWN/YELLOW

PL5-8

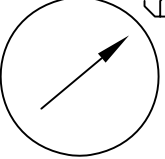
OIL PUMP MOTOR
DRIVER CN2 #10

PLC OUTPUTS
CH100 #05

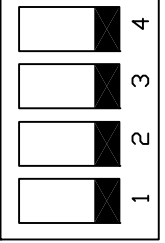
PLC OUTPUTS
CH100 #04



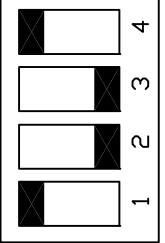
S1



S2



S3



MATERIAL
N/A

DRAWN BY
SLS

DATE
07/23/13

APPROVED:
MD

DOC
REV

THE KEGEL CO. (689) 734-0200
1951 LONGLEAF BLVD.
LAKE WALES, FL 33859

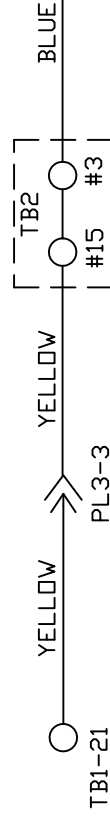
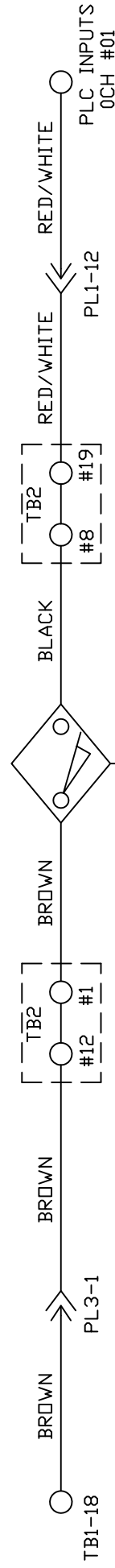
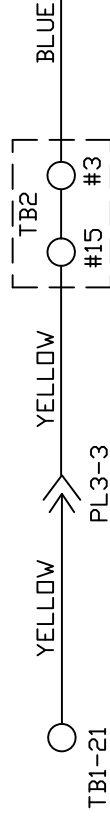
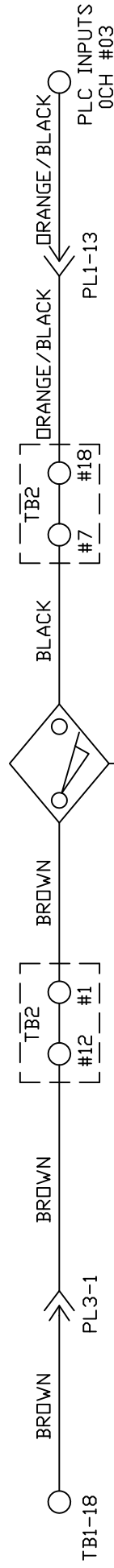
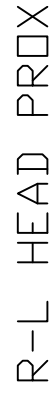
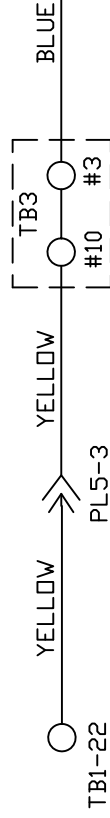
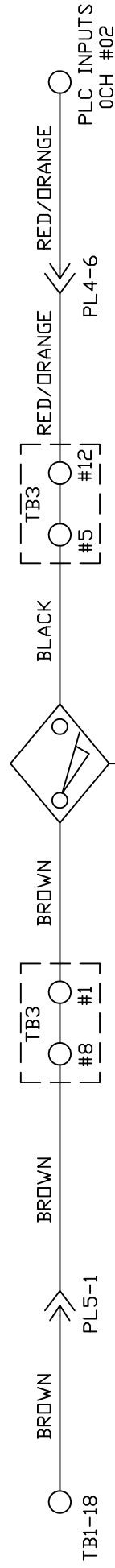
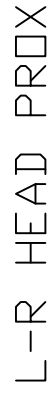
DESCRIPTION

OIL HEAD DRIVER & MOTOR WIRING
FLEX WALKER MODEL A
DO NOT SCALE DRAWING

SIZE
QTY/MACHINE PART NUMBER

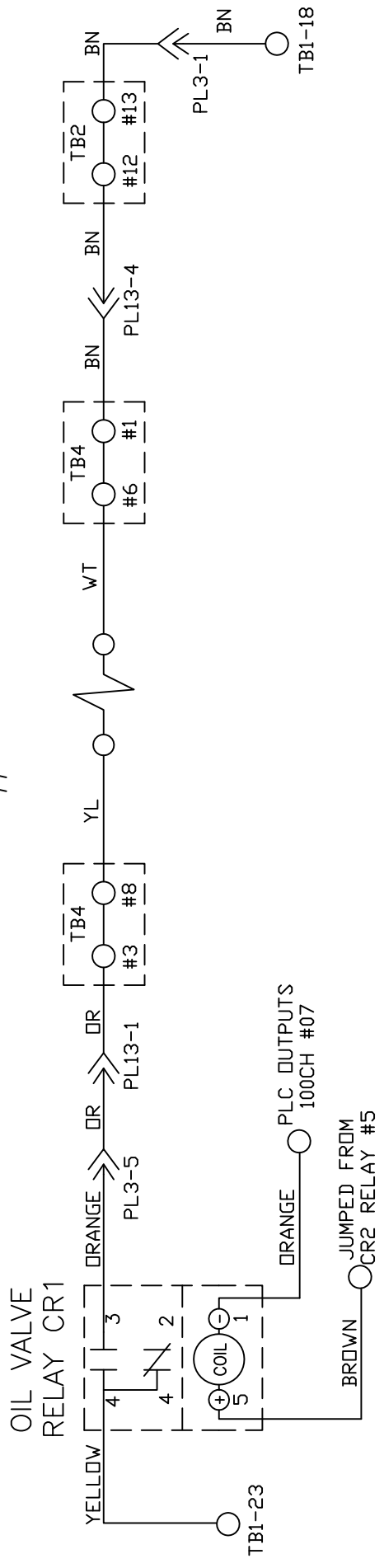
A N/A ALL 17-58XX MODELS

SCALE N/A SHEET 10 OF 27

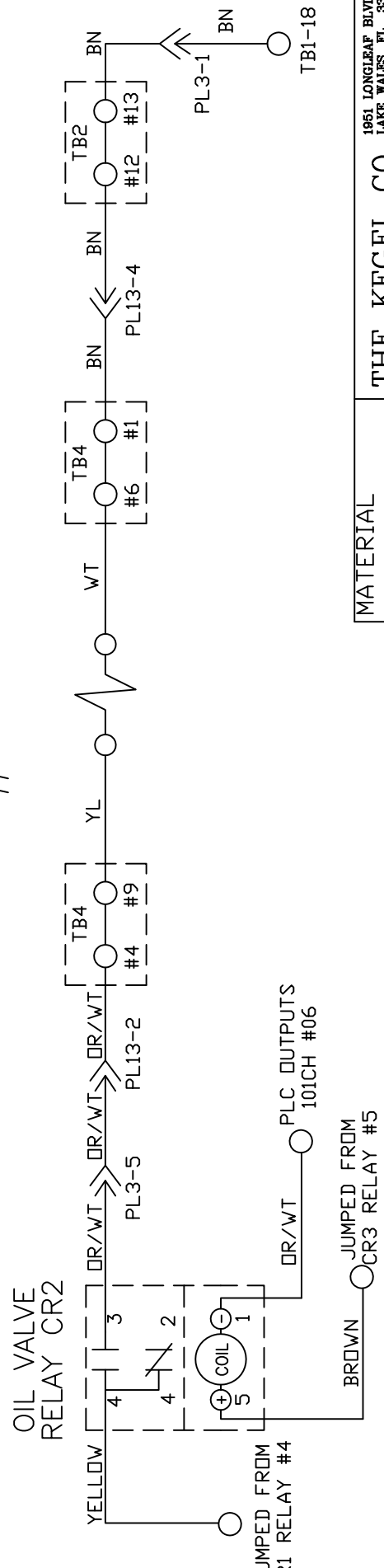


MATERIAL		THE KEGEL CO.				1951 LONGLEAF BLVD. LAKE WALES, FL 33865	
N/A		DESCRIPTION				(863) 734-0200	
DRAWN BY		DATE		L-R, R-L & BOARD PROX WIRING			
SLS		07/23/13		FLEX WALKER MODEL A			
APPROVED:		REV DATE		DO NOT SCALE DRAWING			
MD				SIZE	QTY/MACHINE	PART NUMBER	
				A	N/A	ALL 17-58XX MODELS	
DOC				SCALE	N/A	SHEET	11 OF 27
REV							

OIL VALVE #1 - TANK A



OIL VALVE #2 - TANK B



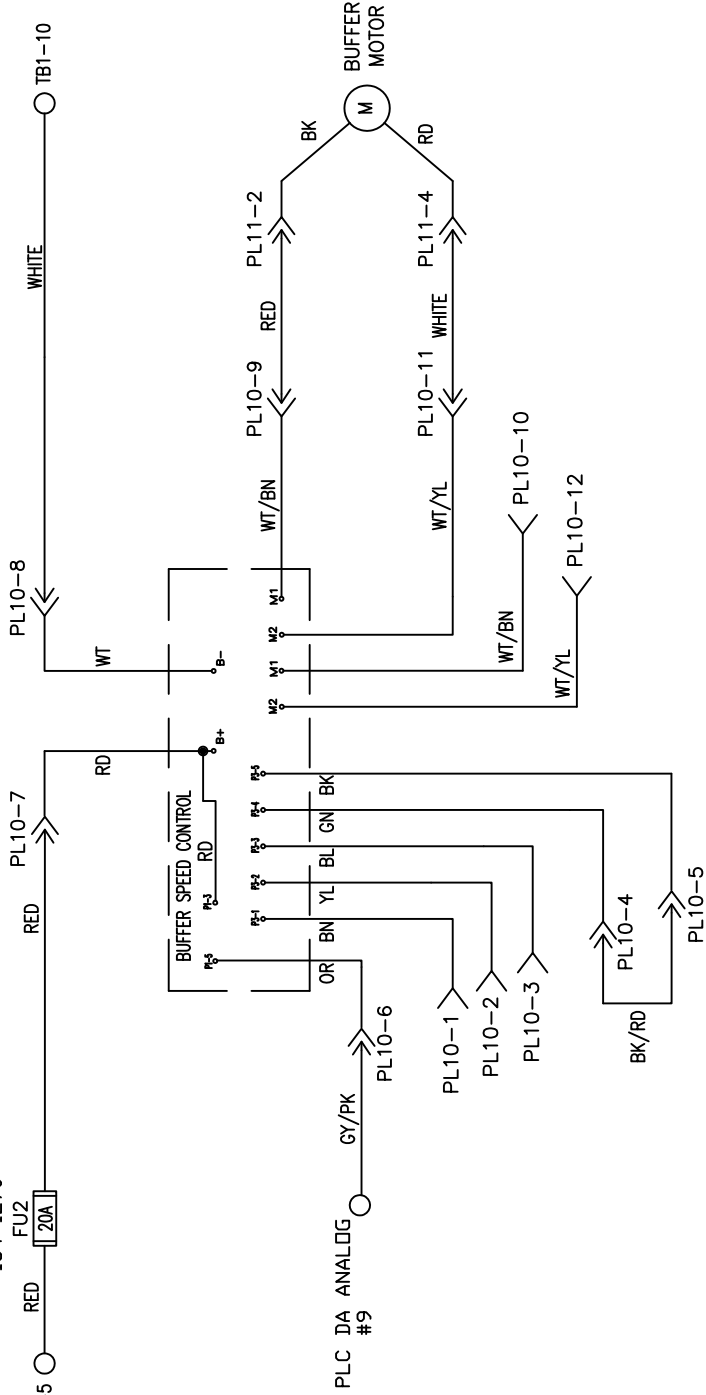
MATERIAL	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200			
	DESCRIPTION OIL VALVES RELAY WIRING FLEX WALKER MODEL A DO NOT SCALE DRAWING			
DRAWN BY SLS	DATE 07/23/13	SIZE A	QTY/MACHINE N/A	REV 12
APPROVED: MD	REV DATE	SCALE N/A	ALL 17-58XX MODELS	OF 27
DOC REV				

4 3 2 1

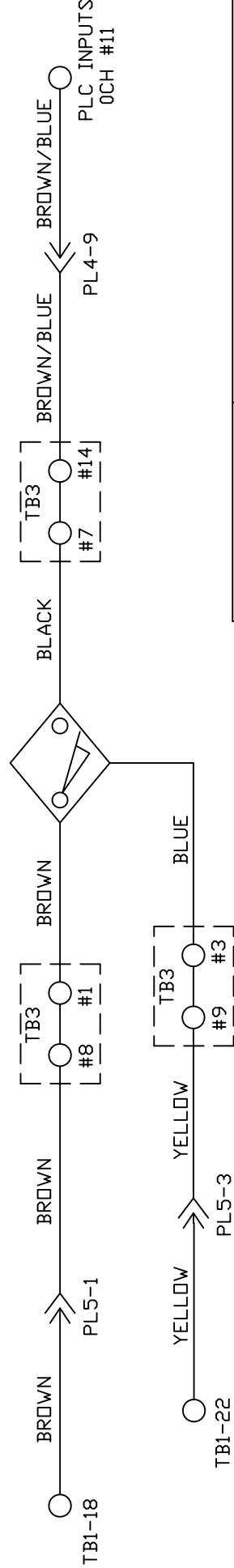
KEGEL P/N
154-1270

FU2
20A

TB1-5 RED TB1-10 WHITE



VARIABLE BUFFER PROX



MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		VARIABLE BUFFER MOTOR/TACH WIRING	
DRAWN BY SLS		DATE 07/23/13		FLEX WALKER MODEL A	
APPROVED:		REV DATE		DO NOT SCALE DRAWING	
MD		SIZE		QTY/MACHINE PART NUMBER	
DOC REV		A		N/A	
		SCALE		N/A	
		SHEET		14 OF 27	

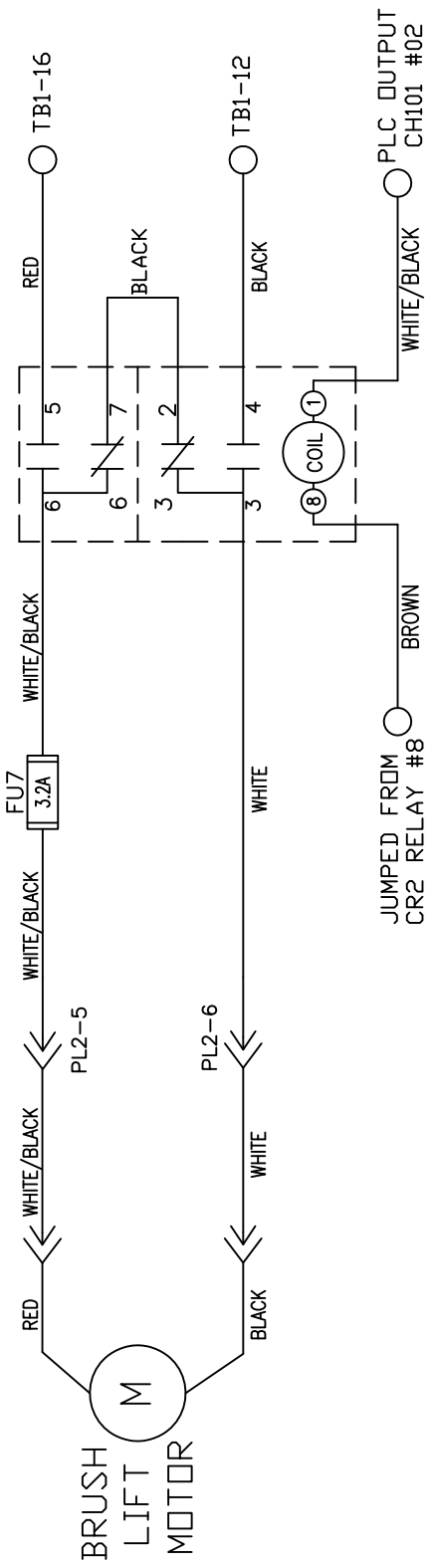
4 3 2 1

4 3 2 1

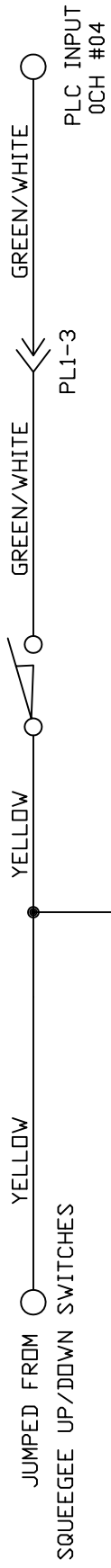
D C B A

BRUSH LIFT
MOTOR RELAY CR7

KEGEL P/N
154-1267



BRUSH UP SWITCH



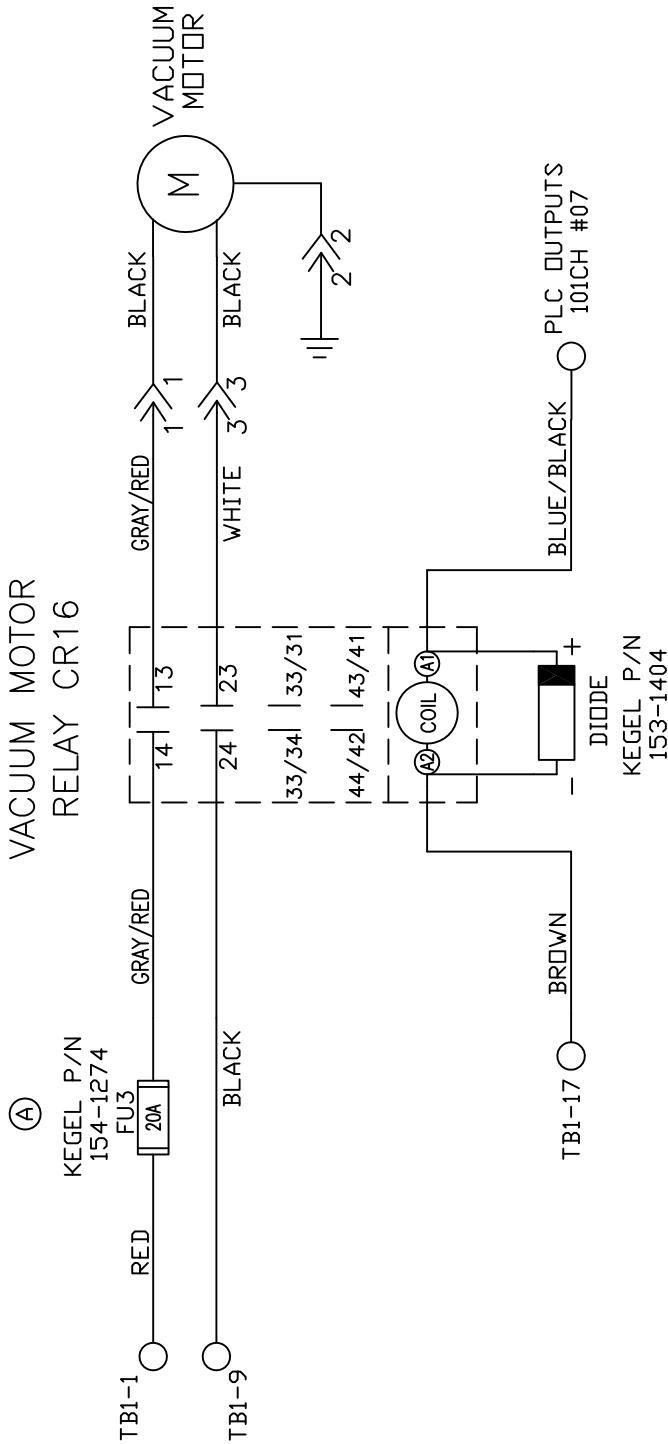
BRUSH DOWN SWITCH



MATERIAL N/A	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200			
	DESCRIPTION BRUSH LIFT MOTOR / SWITCH WIRING FLEX WALKER MODEL A DO NOT SCALE DRAWING			
DRAWN BY SLS	DATE 07/23/13	SIZE A	QTY/MACHINE N/A	SCALE N/A
APPROVED: MD	REV DATE			
DOC REV				

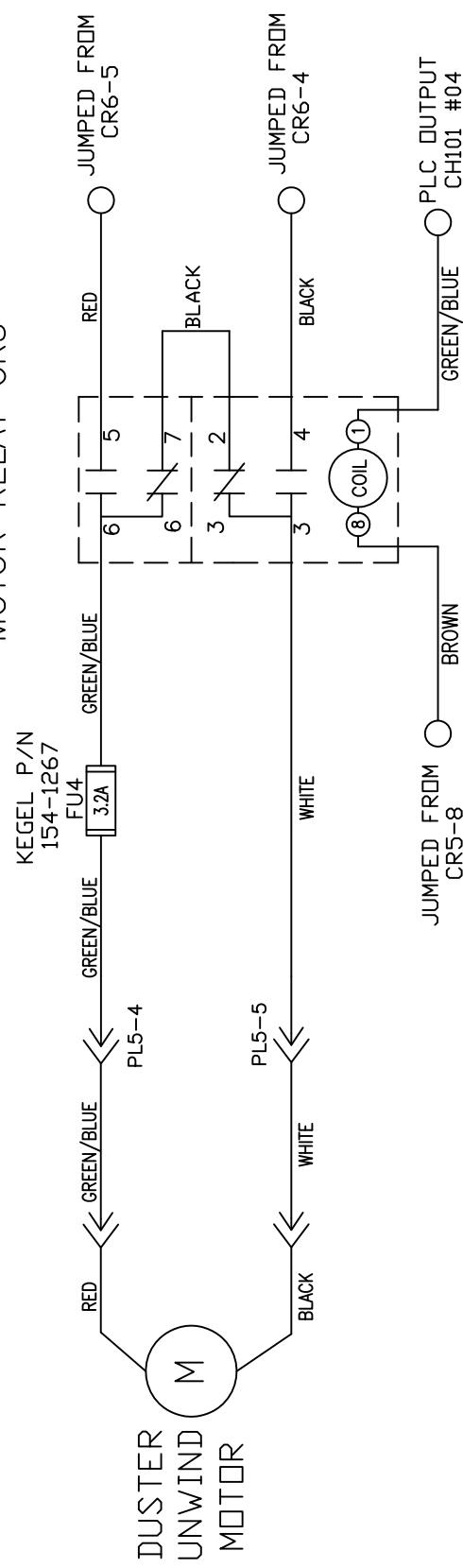
4 3 2 1

REV	LTR	DATE	DESCRIPTION
A		02/28/14	CHANGED FUSE FROM MDA TO MDL E/C# 14134



MATERIAL N/A	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200		
	DESCRIPTION VACUUM MOTOR WIRING		
	FLEX WALKER MODEL A DO NOT SCALE DRAWING		
DRAWN BY SLS	DATE 07/23/13	SIZE A	QTY/MACHINE PART NUMBER N/A
APPROVED: MD	REV DATE 02/28/14	SCALE N/A	SHEET 16 OF 27

DUSTER UNWIND
MOTOR RELAY CR5



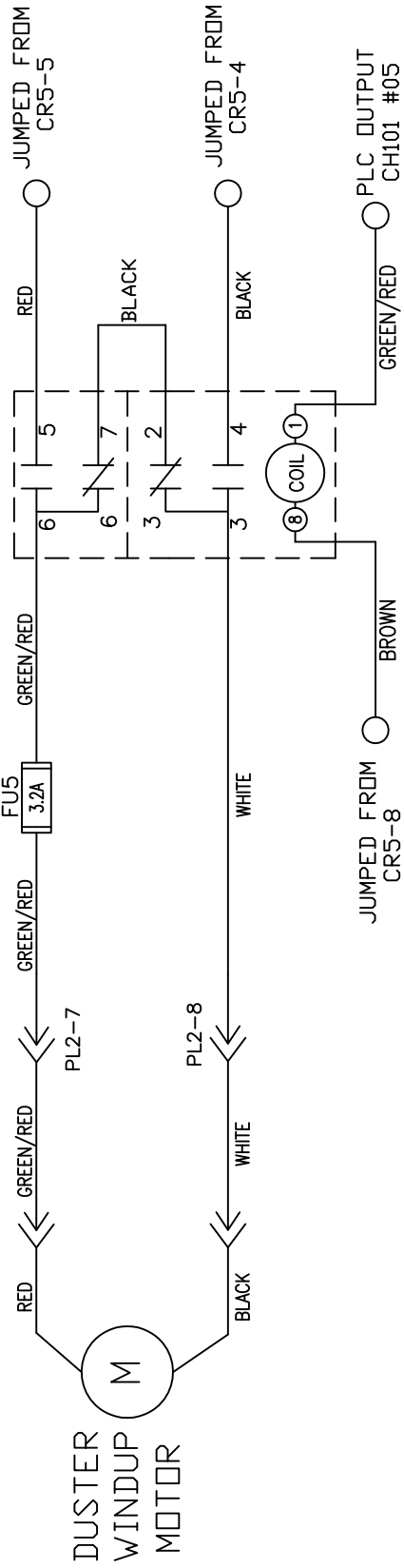
MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
N/A		DESCRIPTION		DUSTER UNWIND / SWITCH WIRING	
DRAWN BY SLS	DATE 07/23/13	FLEX WALKER MODEL A		DO NOT SCALE DRAWING	
APPROVED:	REV DATE	SIZE	QTY/MACHINE	PART NUMBER	
MD		A	N/A	ALL 17-58XX MODELS	
DOC REV		SCALE	N/A	SHEET 18	OF 27

4 3 2 1

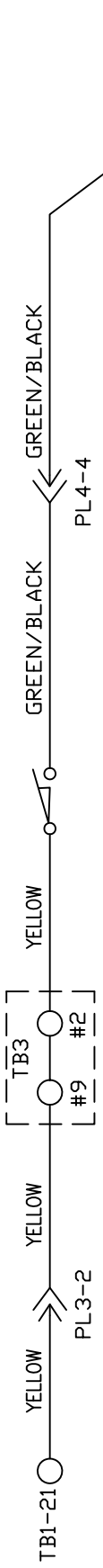
D C B A

DUSTER WINDUP
MOTOR RELAY CR4

KEGEL P/N
154-1267



7-PIN SIDE
DUSTER UP SWITCH



10-PIN SIDE
DUSTER UP SWITCH



MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
N/A		DESCRIPTION		DUSTER WINDUP / SWITCH WIRING	
DRAWN BY SLS		DATE 07/23/13		FLEX WALKER MODEL A	
APPROVED:		REV DATE		DO NOT SCALE DRAWING	
MD		SIZE		QTY/MACHINE PART NUMBER	
DOC REV		A		N/A	
		SCALE		N/A	
		SHEET		19 OF 27	

4 3 2 1

KEGEL P/N
154-1267

FU14
3.2A

RED/YELLOW

BLUE

WHITE/VIOLET

PL8-2

WHITE

TB1-10

JUMPED FROM OIL
HEAD MOTOR FUSE

PLC AD021 ANALOG
B2-

YELLOW

RED/GREEN

PL8-4

BLACK/GREEN

PLC AD021 ANALOG
B1-

BLUE/RED

PL8-5

BLUE/GREEN

PL8-6

A1

A2

CLEANER PUMP #2
SPEED CONTROL

MOUNTED ON TANK WALL
UNDER PC PLATE

BLUE/GREEN

PL8-9

WHITE

PL8-8

BLUE/GREEN

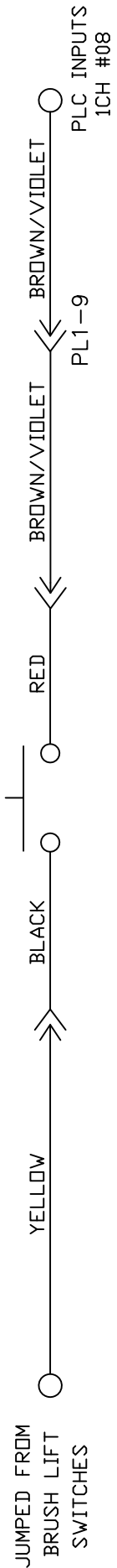
CLEANER PUMP #2 MOTOR

BLACK

RED

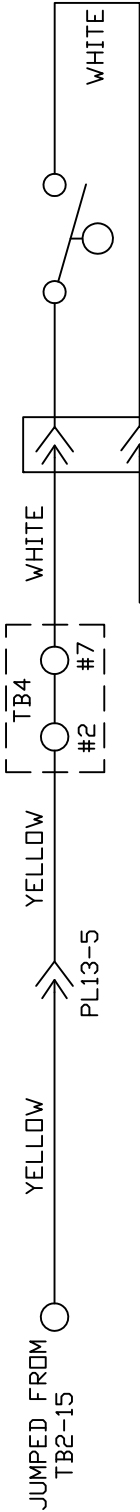
MATERIAL	THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
	N/A		DESCRIPTION	
DRAWN BY	SLS	DATE	07/23/13	CLEANER PUMP # 2 SPEED CONTROL WIRING
APPROVED:	MD	REV DATE		FLEX WALKER MODEL A
		REV DATE		DO NOT SCALE DRAWING
		SIZE	QTY/MACHINE	PART NUMBER
		A	N/A	ALL 17-58XX MODELS
DOC	REV	SCALE	N/A	SHEET 21 OF 27

DUSTER/PRESOAK BUTTON

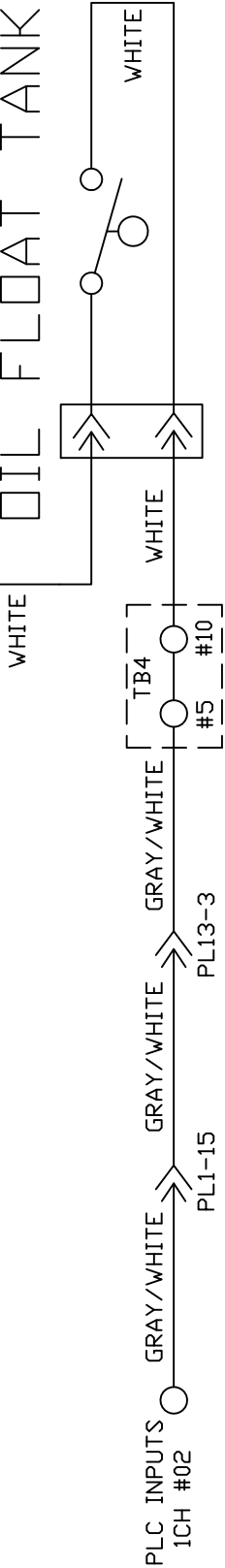


MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		DUSTER/PRESOAK BUTTON	
DRAWN BY	DATE	FLEX WALKER MODEL A		DO NOT SCALE DRAWING	
SLS	07/23/13	SIZE		QTY/MACHINE PART NUMBER	
APPROVED:	REV DATE	A	N/A	ALL 17-58XX MODELS	
MD		SCALE	N/A	SHEET 22 OF 27	
DOC					
REV					

OIL FLOAT TANK A



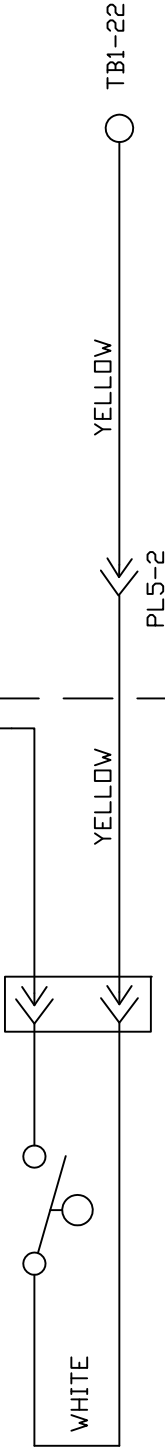
OIL FLOAT TANK B



CLEANER FLOAT PUMP #1



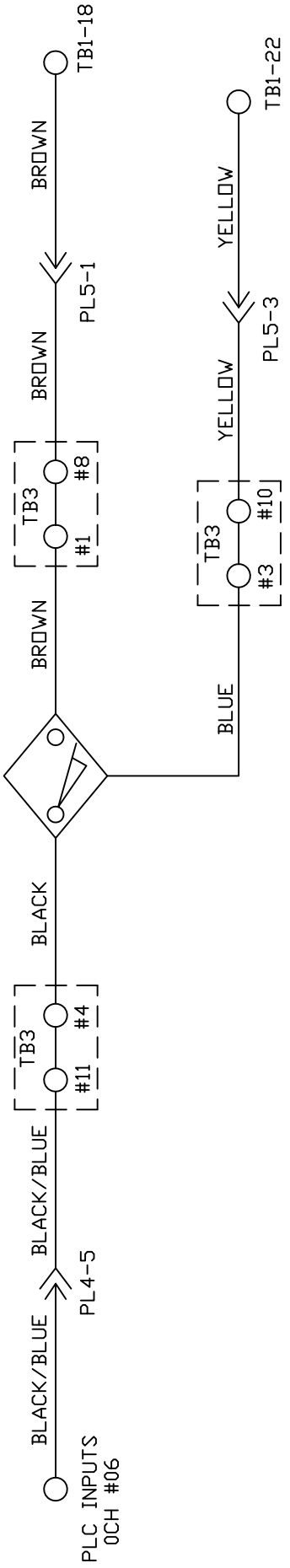
CLEANER FLOAT PUMP #2



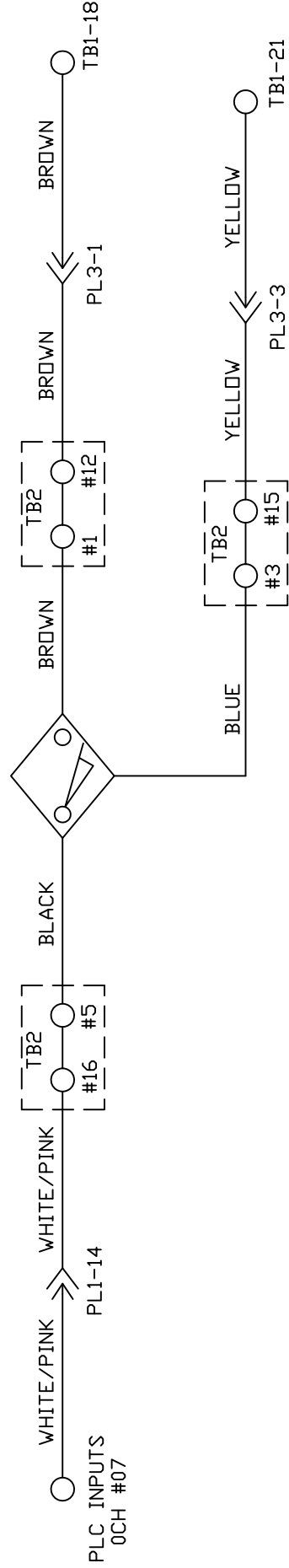
OPTIONAL CLEANER UPGRADE

MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		OIL FLOATS & CLEANER FLOATS WIRING	
DRAWN BY	DATE	FLEX WALKER		MODEL A	
SLS	07/23/13	DO NOT SCALE DRAWING			
APPROVED:	REV DATE	SIZE	QTY/MACHINE	PART NUMBER	
MD		A	N/A	ALL 17-58XX MODELS	
DOC		SCALE	N/A	SHEET	23 OF 27
REV					

SPEED TACH PROX

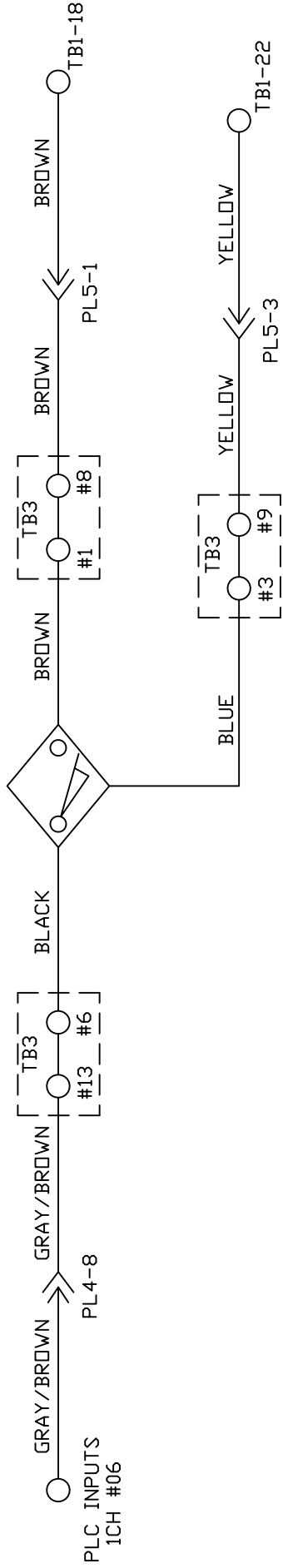


LANE DISTANCE PROX

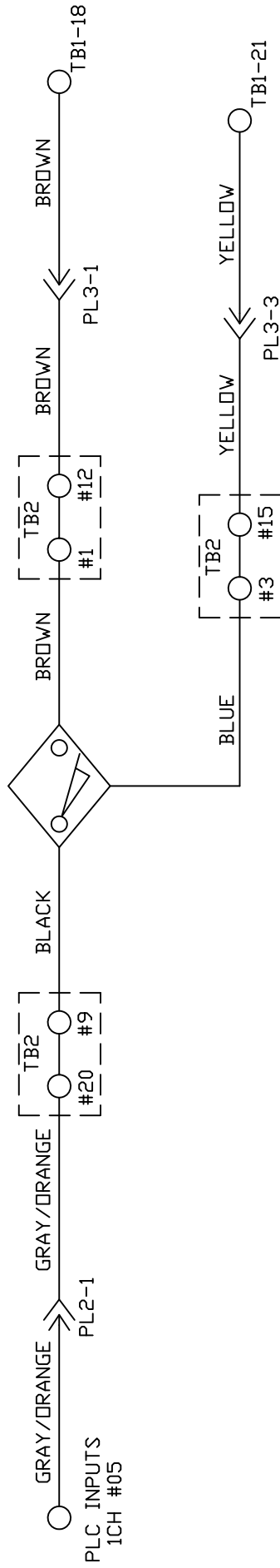


MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
N/A		DESCRIPTION		SPEED TACH / LANE DISTANCE WIRING	
DRAWN BY SLS		DATE 07/23/13		FLEX WALKER MODEL A	
APPROVED:		REV DATE		DO NOT SCALE DRAWING	
MD		SIZE		QTY/MACHINE PART NUMBER	
DOC		SCALE		A N/A ALL 17-58XX MODELS	
REV		SHEET		24 OF 27	

ADS PROX 7-PIN SIDE

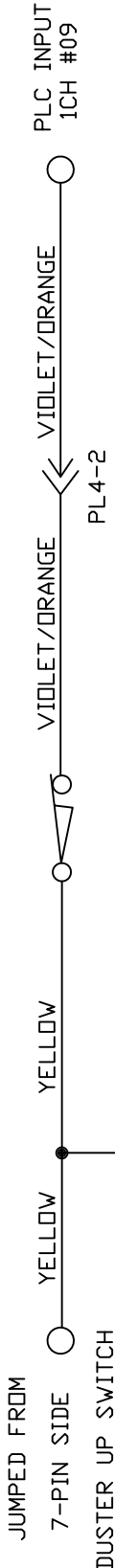


ADS PROX 10-PIN SIDE

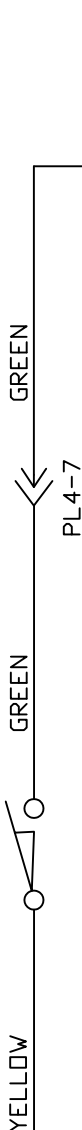


MATERIAL		THE KEGEL CO.				1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (863) 734-0200	
N/A		DESCRIPTION					
DRAWN BY		DATE		ADS WIRING 7-PIN & 10-PIN SIDE			
SLS		07/23/13		FLEX WALKER MODEL A			
APPROVED:		REV DATE		DO NOT SCALE DRAWING			
				SIZE QTY/MACHINE PART NUMBER			
MD				A N/A		ALL 17-58XX MODELS	
DOC				SCALE		N/A	
REV				SHEET		26 OF 27	

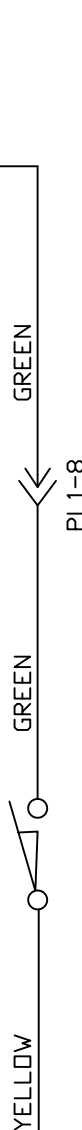
7-PIN SIDE WHISKER SWITCH



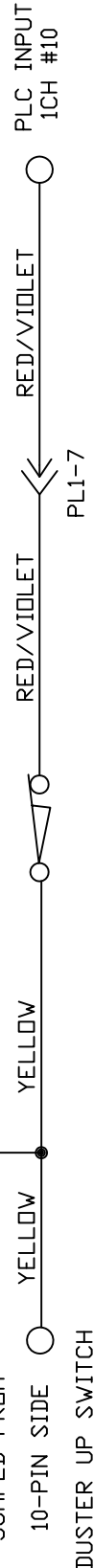
7-PIN SIDE BUMPER SWITCH



10-PIN SIDE BUMPER SWITCH



10-PIN SIDE WHISKER SWITCH



MATERIAL	THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859			
	N/A			
DRAWN BY	DATE	DESCRIPTION		
SLS	07/23/13	BUMPER & WHISKER SWITCH WIRING		
APPROVED:	REV DATE	FLEX WALKER MODEL A		
MD		DO NOT SCALE DRAWING		
DOC		SIZE	QTY/MACHINE	PART NUMBER
REV		A	N/A	ALL 17-58XX MODELS
		SCALE	N/A	SHEET 27 OF 27