

# **FLEX**



# 2018

OPERATORS MANUAL  
Edition 03:18

# CHAPTER 7

## Miscellaneous Parts

### Stickers and Decals



153-0037



154-0272



154-0274



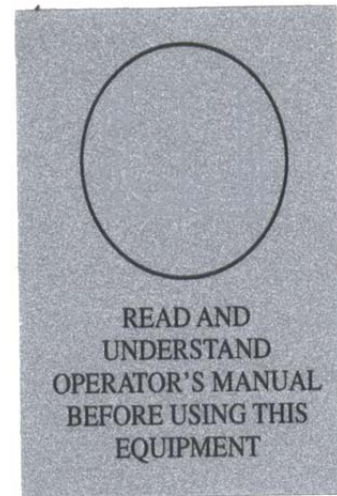
154-0297



154-0266



154-0269



158-0207



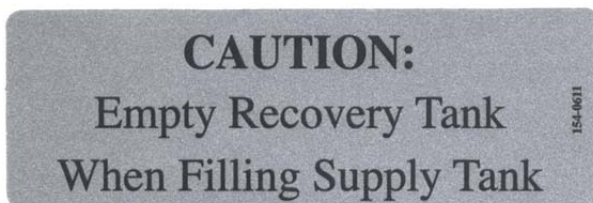
154-0647



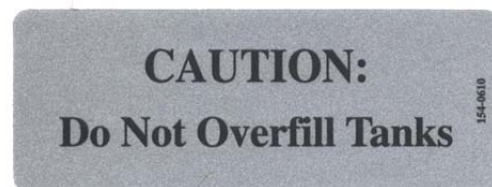
154-0648



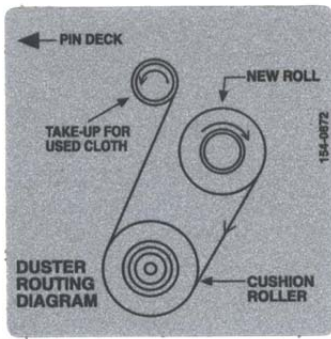
164-0013



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

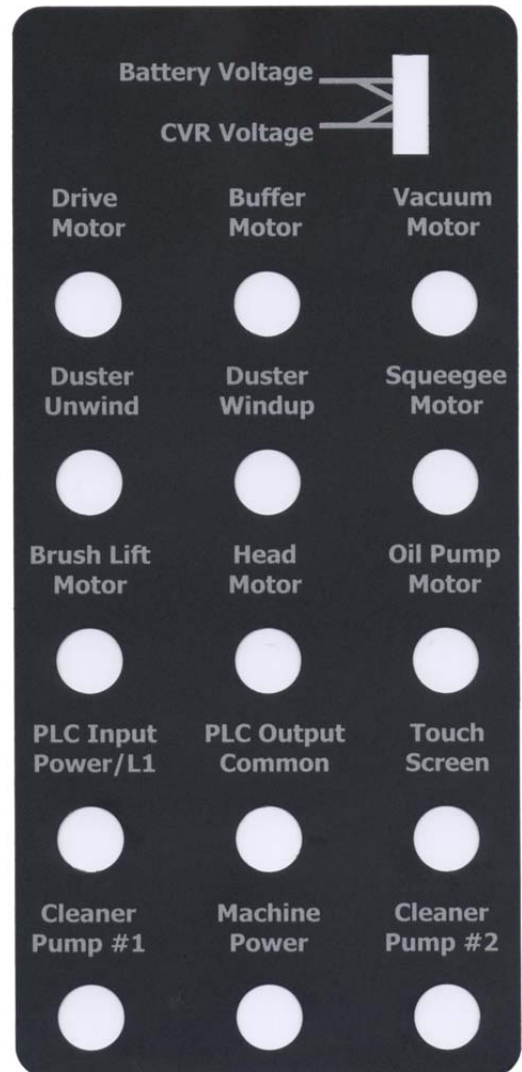
154-0262



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

154-0265

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



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



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



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



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



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



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



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



# CHAPTER 8

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## 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

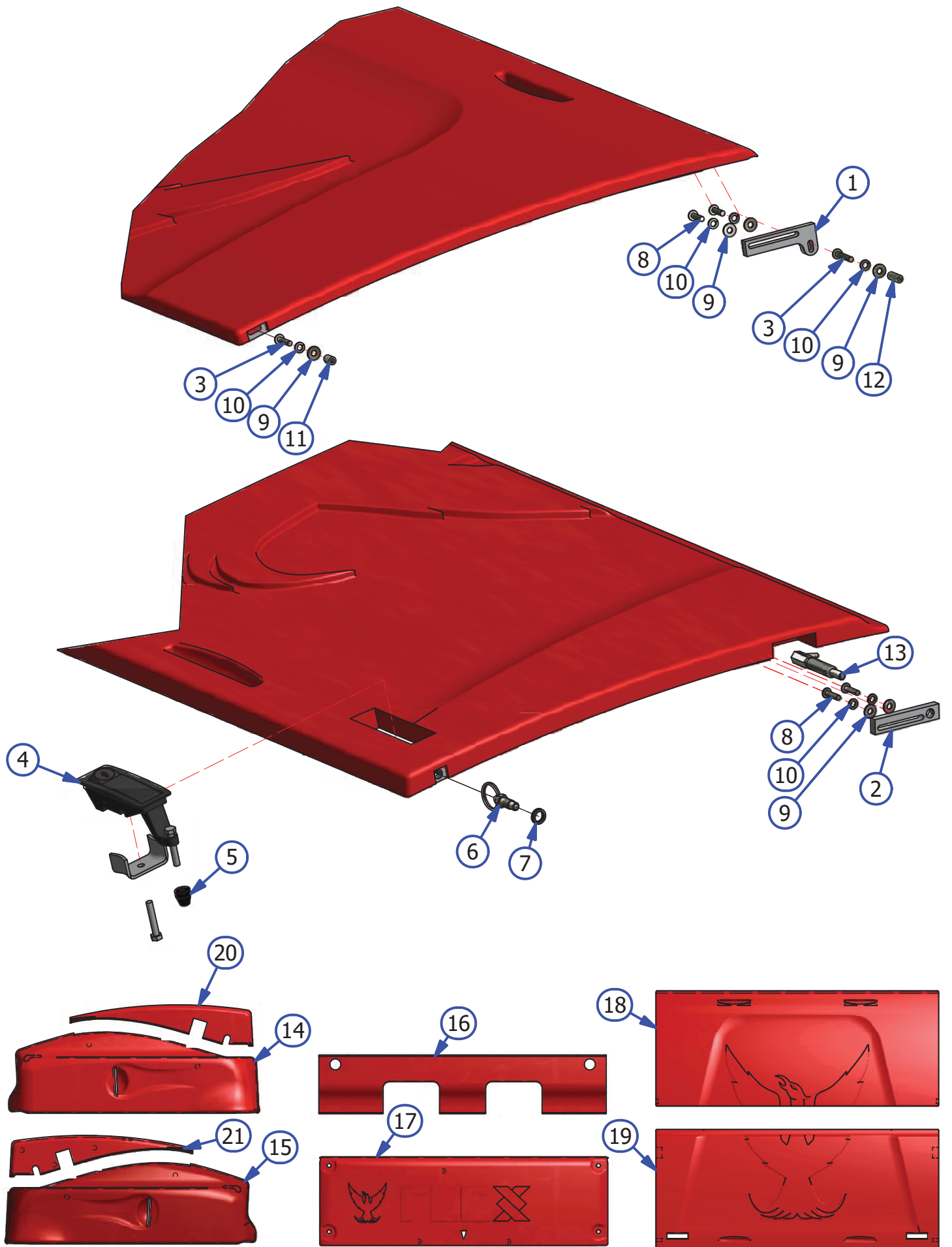
EXTERNAL BATTERY CHARGER ASSEMBLY – 230v

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

# LID AND COVER ASSEMBLY - FLEX

REV. 8/18

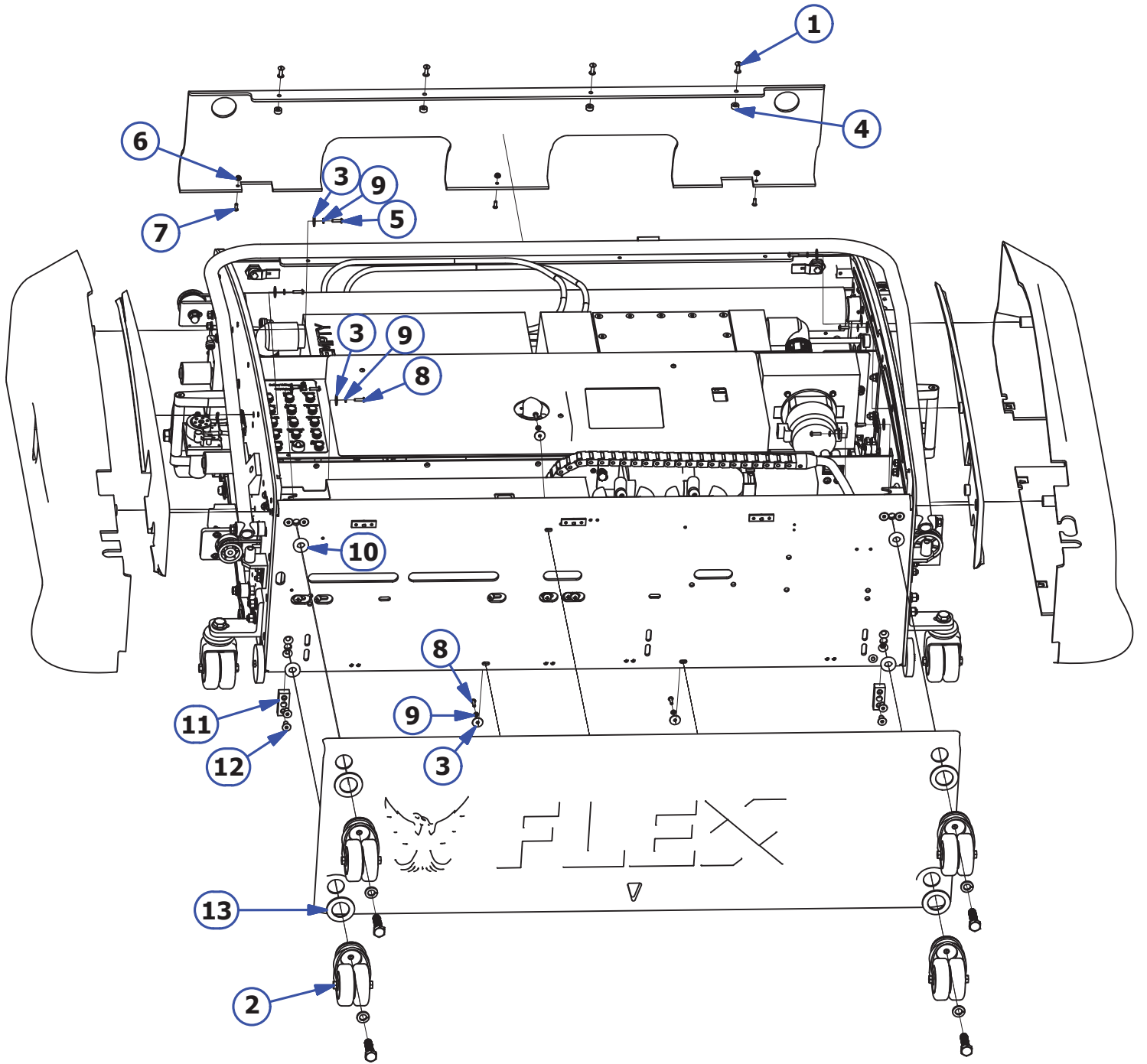
<u>INDEX</u>				
<u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	164-6234	SLIDING LID MOUNT (CLEANING LID)	EA
2	2	164-6233	SLIDING LID MOUNT (CONDITIONING LID)	EA
3	4	164-2072	SHCS 8-32 X 3/4 THREAD LOCKING PATCH	EA
4	2	153-2232L	FLUSH MOUNT LID LATCH (WITH LOCK)	EA
5	2	164-6164	LID LATCH BUMPER	EA
6	2	164-2002	DETENT - SPRING PLUNGER	EA
7	2	164-2041	SHIM FOR SCREW SHOULDER	EA
8	8	153-2086	MS PHILLIPS 8-32 X 5/8	EA
9	12	153-2002	FLAT WASHER #8	EA
10	12	153-2013	LOCK WASHER #10	EA
11	2	164-2044	STANDOFF FEMALE THREADED 8-32 X 3/8	EA
12	2	164-2071	STANDOFF FEMALE THREADED	EA
13	2	164-2069	SPRING PLUNGER THREADED	EA
14	1	164-8234	FLEX LT SIDE GUARD - WHITE	EA
	1	164-8234-1525	FLEX LT SIDE GUARD - BLUE	EA
	1	164-8234-2850	FLEX LT SIDE GUARD - BLACK	EA
	1	164-8234-2911	FLEX LT SIDE GUARD - RED	EA
15	1	164-8235	FLEX RT SIDE GUARD - WHITE	EA
	1	164-8235-1525	FLEX RT SIDE GUARD - BLUE	EA
	1	164-8235-2850	FLEX RT SIDE GUARD - BLACK	EA
	1	164-8235-2911	FLEX RT SIDE GUARD - RED	EA
16	1	164-8236	FRONT BUMPER - WHITE	EA
	1	164-8236-1525A	FRONT BUMPER - BLUE	EA
	1	164-8236-2850A	FRONT BUMPER - BLACK	EA
	1	164-8236-2911A	FRONT BUMPER - RED	EA
17	1	164-8049	FLEX BACK PANEL - WHITE	EA
	1	164-8049-1525	FLEX BACK PANEL - BLUE	EA
	1	164-8049-2850	FLEX BACK PANEL - BLACK	EA
	1	164-8049-2911	FLEX BACK PANEL - RED	EA
18	1	164-8230	SLIDING CLEANER COMPARTMENT LID - WHITE	EA
	1	164-8231-2850	SLIDING CLEANER COMPARTMENT LID - BLACK	EA
	1	164-8230-2911	SLIDING CLEANER COMPARTMENT LID - RED	EA
	1	164-8230-1525	SLIDING CLEANER COMPARTMENT LID - BLUE	EA
19	1	164-8231	SLIDING LID ASSEMBLY - WHITE	EA
	1	164-8231-2850	SLIDING LID ASSEMBLY - BLACK	EA
	1	164-8231-2911	SLIDING LID ASSEMBLY - RED	EA
	1	164-8231-1525	SLIDING LID ASSEMBLY - BLUE	EA
21	1	164-6733	LEFT SIDE GUARD FLEX UPPER - WHITE	EA
	1	164-6733-2850	LEFT SIDE GUARD FLEX UPPER - BLACK	EA
	1	164-6733-2911	LEFT SIDE GUARD FLEX UPPER - RED	EA
	1	164-6733-1525	LEFT SIDE GUARD FLEX UPPER - BLUE	EA
22	1	164-6732	RIGHT SIDE GUARD FLEX UPPER - WHITE	EA
	1	164-6732-2850	RIGHT SIDE GUARD FLEX UPPER - BLACK	EA
	1	164-6732-2911	RIGHT SIDE GUARD FLEX UPPER - RED	EA
	1	164-6732-1525	RIGHT SIDE GUARD FLEX UPPER - BLUE	EA



# PANEL EXPLOSION - FLEX

REV. 9/17

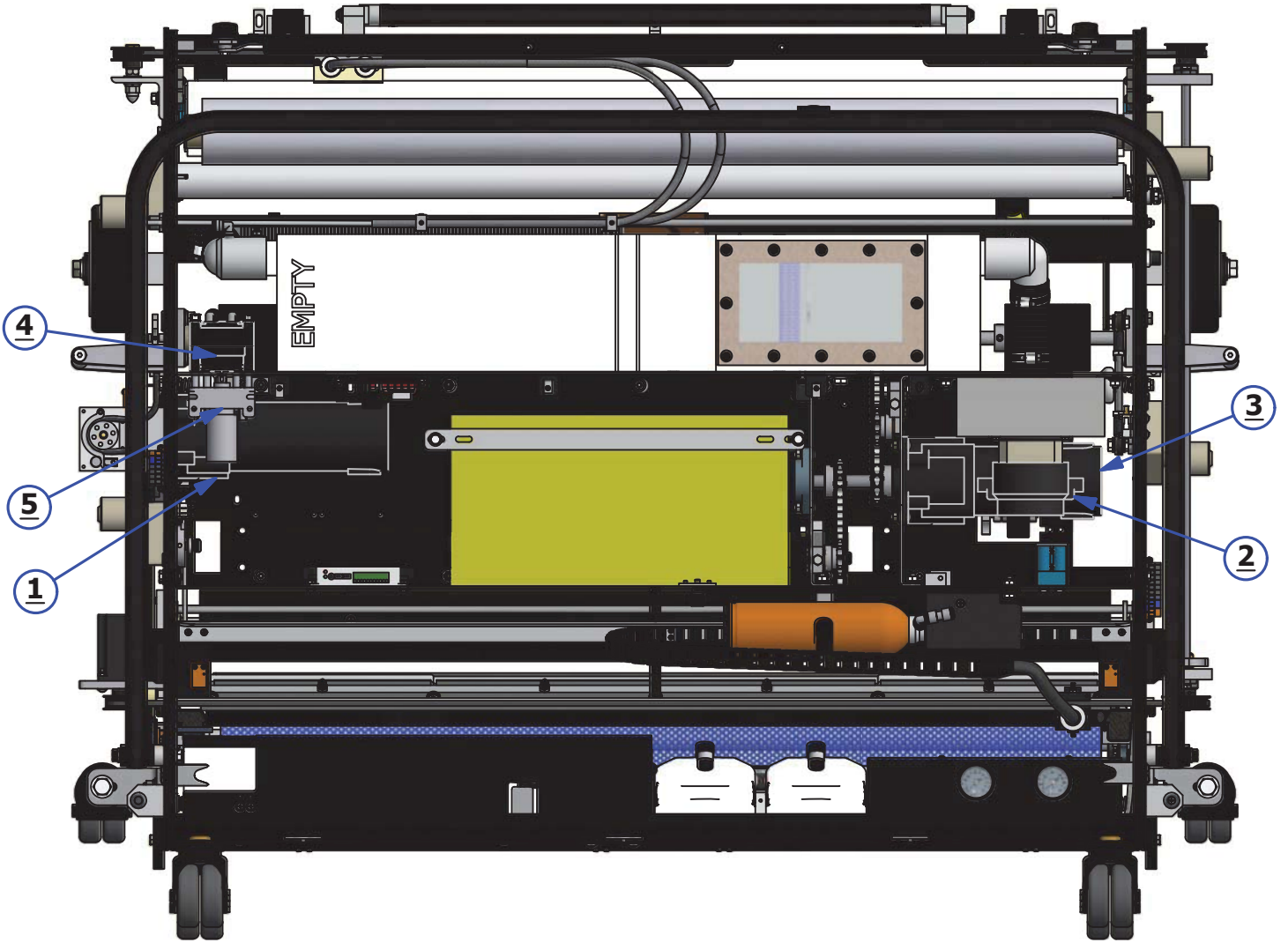
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	4	164-2066	BINDING POST	EA
2	4	164-8814	TRANSPORT CASTER ASSEMBLY - COMPLETE	EA
	4	153-0001BK	TRANSPORT CASTER - CASTER ONLY	EA
	4	153-2017	1/2 LOCKWASHER	EA
	4	164-2039	HHCS 1/2-13 X 1 3/4 GRADE 5	EA
3	11	153-2953	FENDER WASHER - #8	EA
4	4	164-2038	RUBBER BUMPER SBR	EA
5	4	153-2087	MS PHILLIPS - 8-32 X 3/4	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	4	164-2084	WASHER - OVERSIZED 1/2"	EA
11	4	164-6252	TRANSPORT CASTER MOUNT	EA
12	8	153-2802	FHSS - 5/16-18 X 5/8"	EA
13	4	164-2080	FELT WASHER (BLACK)	EA



# TOP VIEW - FLEX

REV. 1/17

<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
<b>1</b>	1	158-8414	BUFFER MOTOR - 24VDC - 500RPM - STANDARD	EA
	1	158-1406B	BUFFER MOTOR BRUSHES (PAIR)	PR
	1	164-9016	BUFFER BELT STANDARD	EA
	1	158-9401	PULLEY (14 TOOTH 1/2" BORE)	EA
<b>1</b>	1	164-8014	BUFFER MOTOR - 24VDC - 700RPM - VARIABLE BUFFER	EA
	1	158-1405B	BUFFER MOTOR BRUSHES (PAIR)	PR
	1	164-9017	BUFFER MOTOR BELT VARIABLE	EA
	1	164-9014A	BUFFER MOTOR PULLEY ASSEMBLY	EA
<b>2</b>	1	164-8217	MAIN DRIVE MOTOR 24V	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
<b>3</b>	1	158-8407	VACUUM MOTOR - 24VDC	EA
<b>4</b>	1	158-8404D	CLEANER PUMP ASSEMBLY	EA
	1	154-0861B	NORPRENE TUBING FOR CLEANER PUMP ASSEMBLY	EA
<b>5</b>	1	158-8404	CLEANER PUMP MOTOR - 24VDC	EA



4

3

5

2

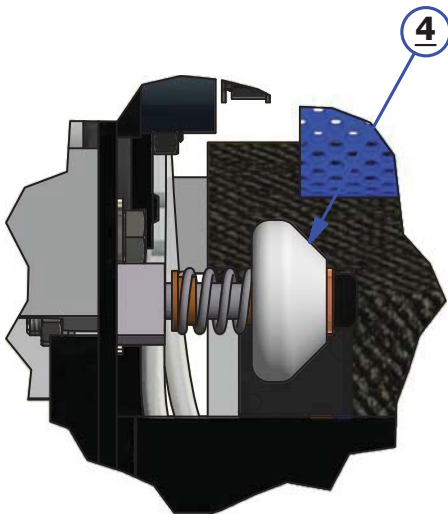
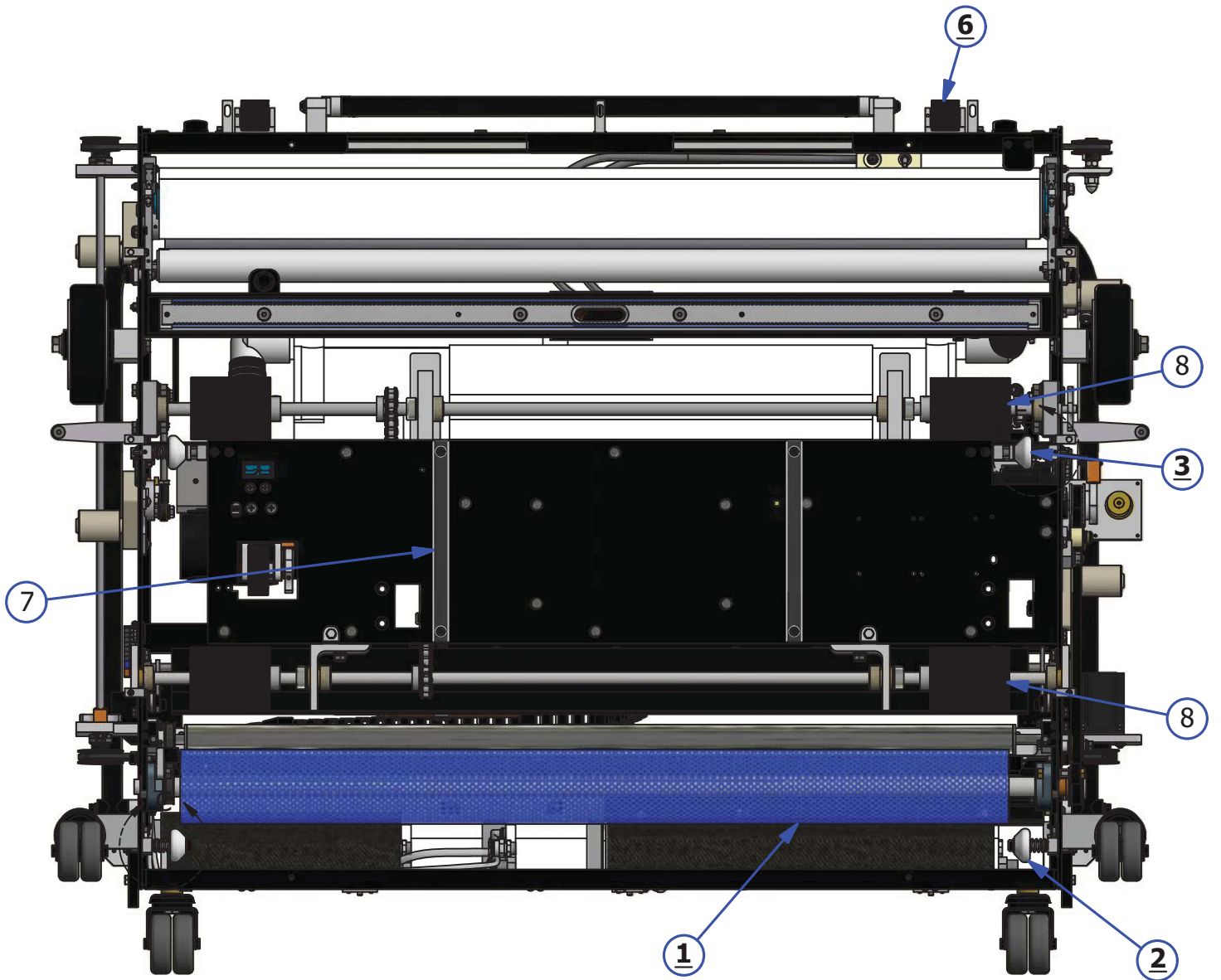
1

# BOTTOM - FLEX

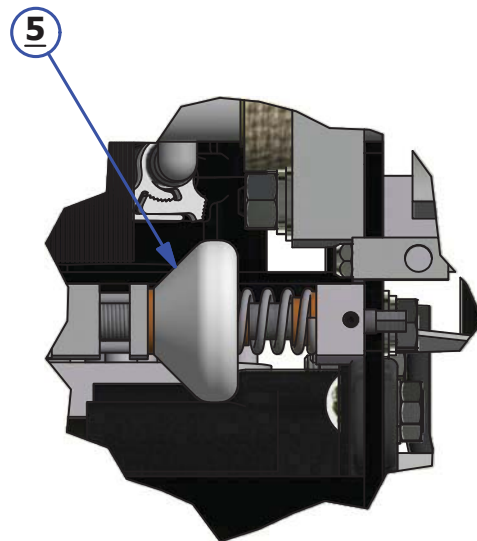
REV. 9/17

<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8001A	BUFFER BRUSH ASSEMBLY	EA
	1	164-9016	BUFFER BELT ASSEMBLY - NON-VARIABLE	EA
	1	164-9017	BUFFER BELT ASSEMBLY - VARIABLE BUFF	EA
2	2	164-8815	REAR GUIDE WHEEL ASSEMBLY - COMPLETE <i>THE BELOW ATTACHED PARTS ARE NOT SHOWN</i>	EA
	2	153-2407	SHOULDER BOLT 3/8 X 1 3/4	EA
	2	153-2978	SPRING - COMPRESSION FOR GUIDE WHEEL	EA
	2	164-8816	GUIDE WHEEL ASSEMBLY - REAR	EA
3	2	158-8643	FRONT GUIDE WHEEL ASSEMBLY - COMPLETE <i>THE BELOW ATTACHED PARTS ARE NOT SHOWN</i>	EA
	2	153-9803	FLANGED BUSHING - 3/8 X 1/2 X 3/4	EA
	2	153-2978	SPRING - COMPRESSION FOR GUIDE WHEEL	EA
	2	158-8637	GUIDE WHEEL ASSEMBLY - FRONT	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		153-9803	SKID GUIDE	EA
8	4	153-7013	DRIVE WHEEL ASSEMBLY	EA





DETAIL A

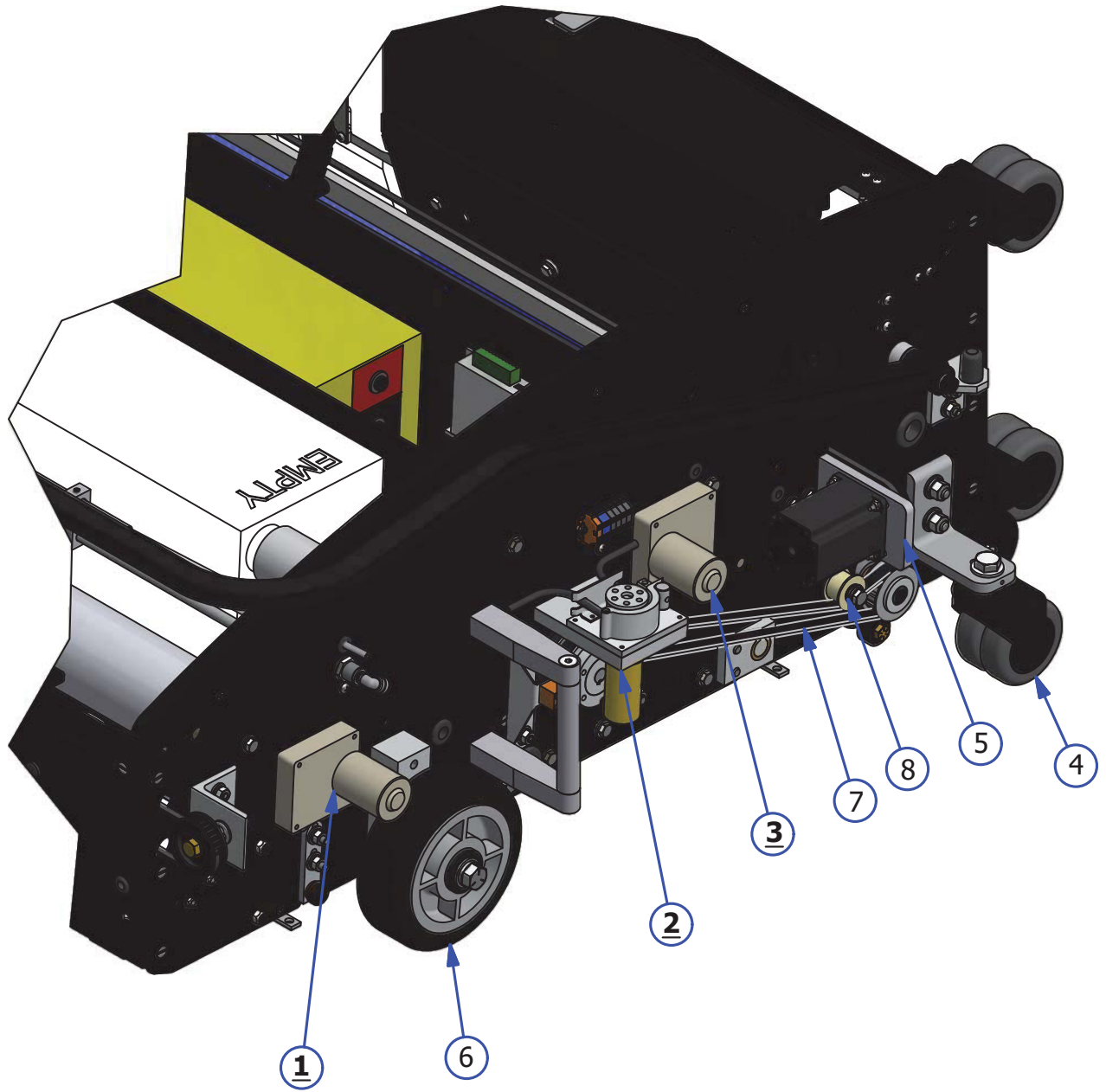


DETAIL B

# LEFT SIDE - FLEX

9/17

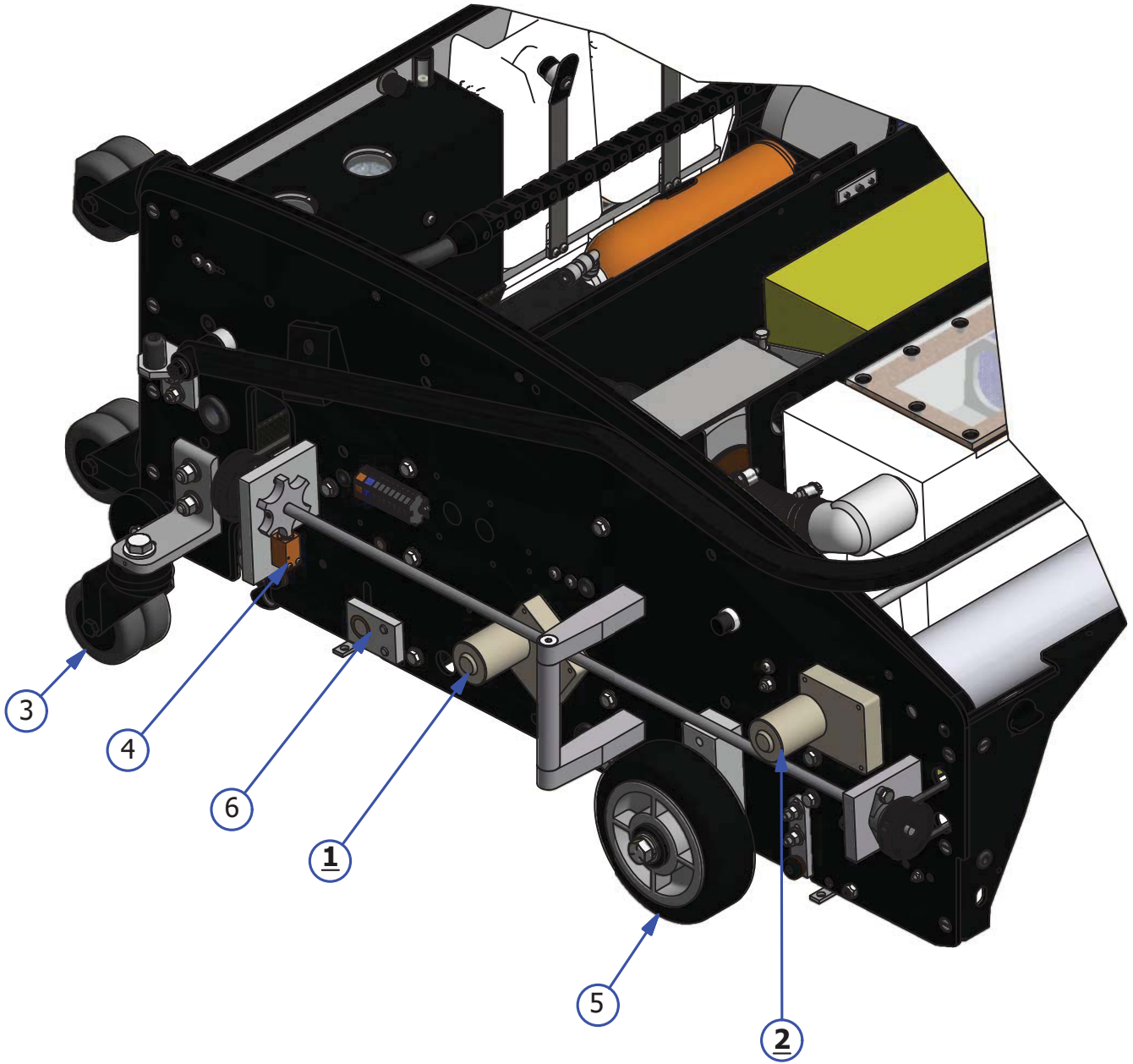
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	158-8403	ASSEMBLY - DUSTER MOTOR 24VDC	EA
2	1	164-8027	CLEANER PUMP ASSEMBLY - CONCENTRATE (UPGRADE ONLY)	EA
		164-8025	CLEANER TUBING #14 FOR SUPER CONCENTRATE	EA
		164-8026	CLEANER TUBING #16 FOR REG CONCENTRATE	EA
3	1	158-8402	BUFFER LOWERING MOTOR	EA
4	2	164-0022	CASTER ASSEMBLY (3 INCH DUAL WHEEL)- BLACK	EA
5	1	164-8032	HEAD DRIVE MOTOR ASSEMBLY	EA
6	2	158-7002	6" WHEEL ASSEMBLY	EA
7	1	164-9016	BUFFER BELT ASSEMBLY - STANDARD	EA
	1	164-9017	BUFFER BELT ASSEMBLY - VARIABLE BUFF UPGRADE	EA
8	1	153-8039	BUFFER IDLER PULLEY	EA



# RIGHT SIDE - FLEX

REV. 1/20

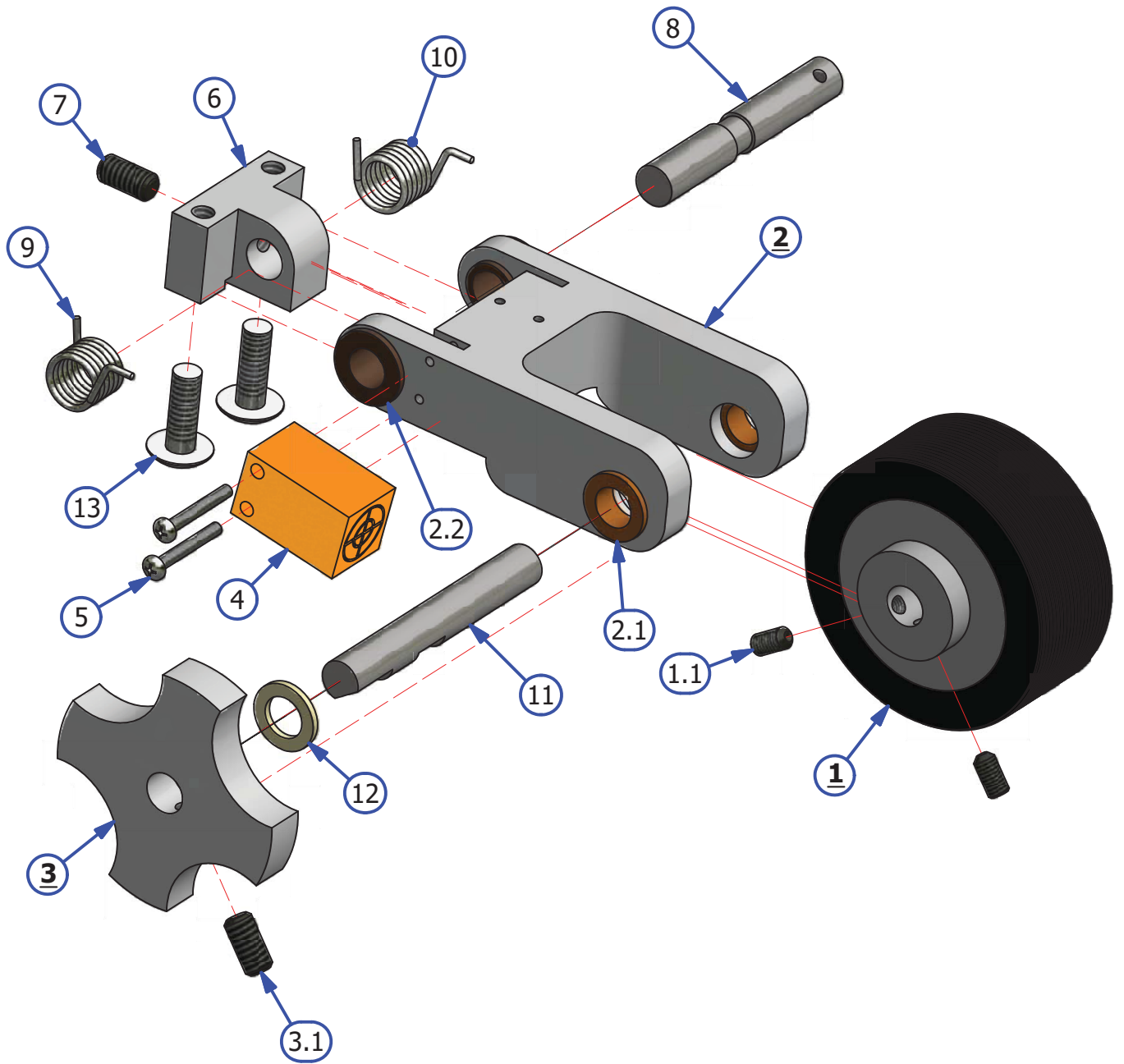
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	158-8402	SQUEEGEE / BRUSH LIFT MOTOR - 24VDC	EA
2	2	158-8403	DUSTER MOTOR ASSEMBLY - 24VDC	EA
3	2	164-0022	CASTER ASSEMBLY (3 INCH DUAL WHEEL)- BLACK	EA
4	1	154-1220	PROXIMITY SENSOR	EA
5	2	158-7002	6" WHEEL ASSEMBLY	EA
	2	164-2074	HHCS 1/2-13 X 3 1/2"	EA
	2	153-2007	FLAT WASHER 1/2"	EA
	2	153-2017	LOCK WASHER	EA
6	2	164-8216	REAR DRIVE SHAFT BLOCK	EA



# LDS ASSEMBLY - FLEX

REV. 9/17

<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-7001A	LDS WHEEL ASSEMBLY	
1.1	2	153-2201	SET SCREW - 10-32 X 3/8	EA
2	1	164-8052	LDS ARM ASSEMBLY	EA
2.1	2	153-9803	FLANGED BUSHING (3/8 X 1/2 X 1/4)	EA
2.2	2	153-9402	FLANGED BUSHING (3/8 x 1/2 x 1/2)	EA
3	1	164-6131A	FLEX LDS DISK	EA
3.1	1	153-2051	SET SCREW - 1/4-20 X 1/2	EA
4	1	154-1220	INDUCTIVE PROXIMITY SENSOR (TL-Q5MC1)	EA
5	2	153-2216A	MS PHILLIPS - 4-40 X 7/8	EA
6	1	164-6128	LDS ARM MOUNT	EA
7	1	153-2051	SET SCREW - 1/4-20 X 1/2	EA
8	1	164-6129	LDS ARM SHAFT	EA
9	1	153-2944	TORSION SPRING - RH	EA
10	1	153-2945	TORSION SPRING - LH	EA
11	1	164-6130	LDS WHEEL SHAFT	EA
12	1	153-2009	NYLON FLAT WASHER (3/8 - 0.060)	EA
13	2	153-2052A	MS PHILLIPS - 1/4-20 X 3/4 TRUSS HEAD	EA

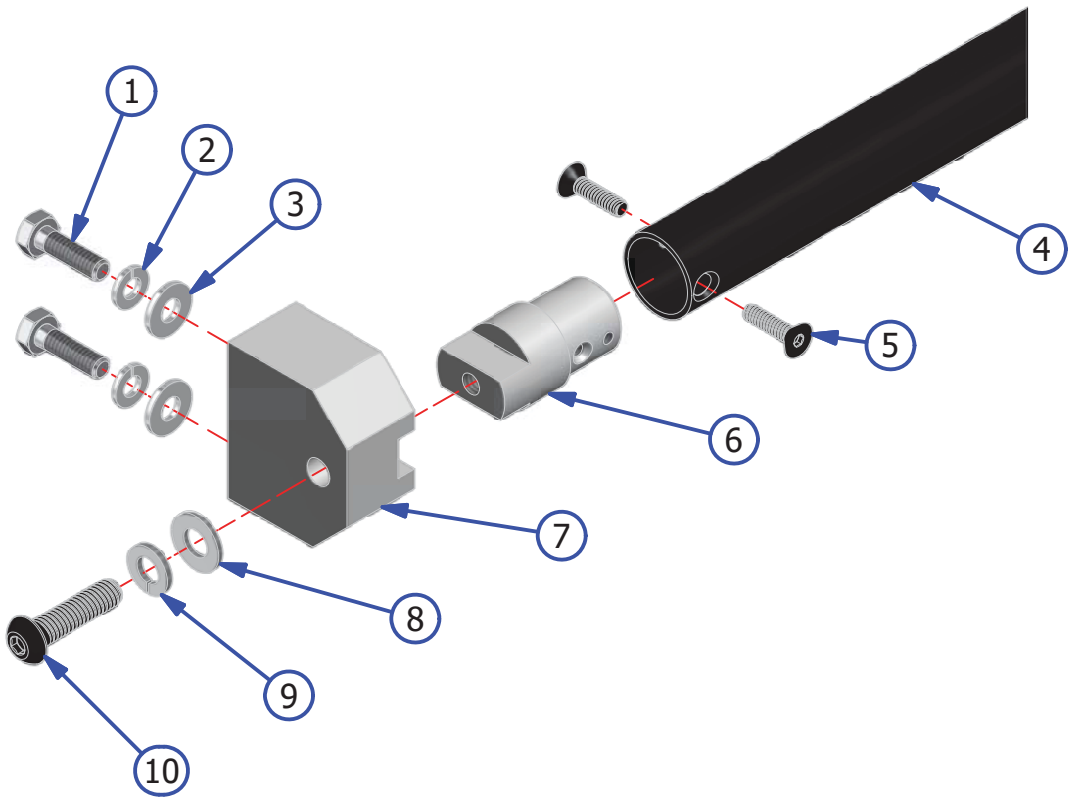


# FRONT HANDLE ASSEMBLY - FLEX

REV. 3/16

<u>INDEX</u> <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	164-8073F	FRONT HANDLE - COMPLETE ASSY	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

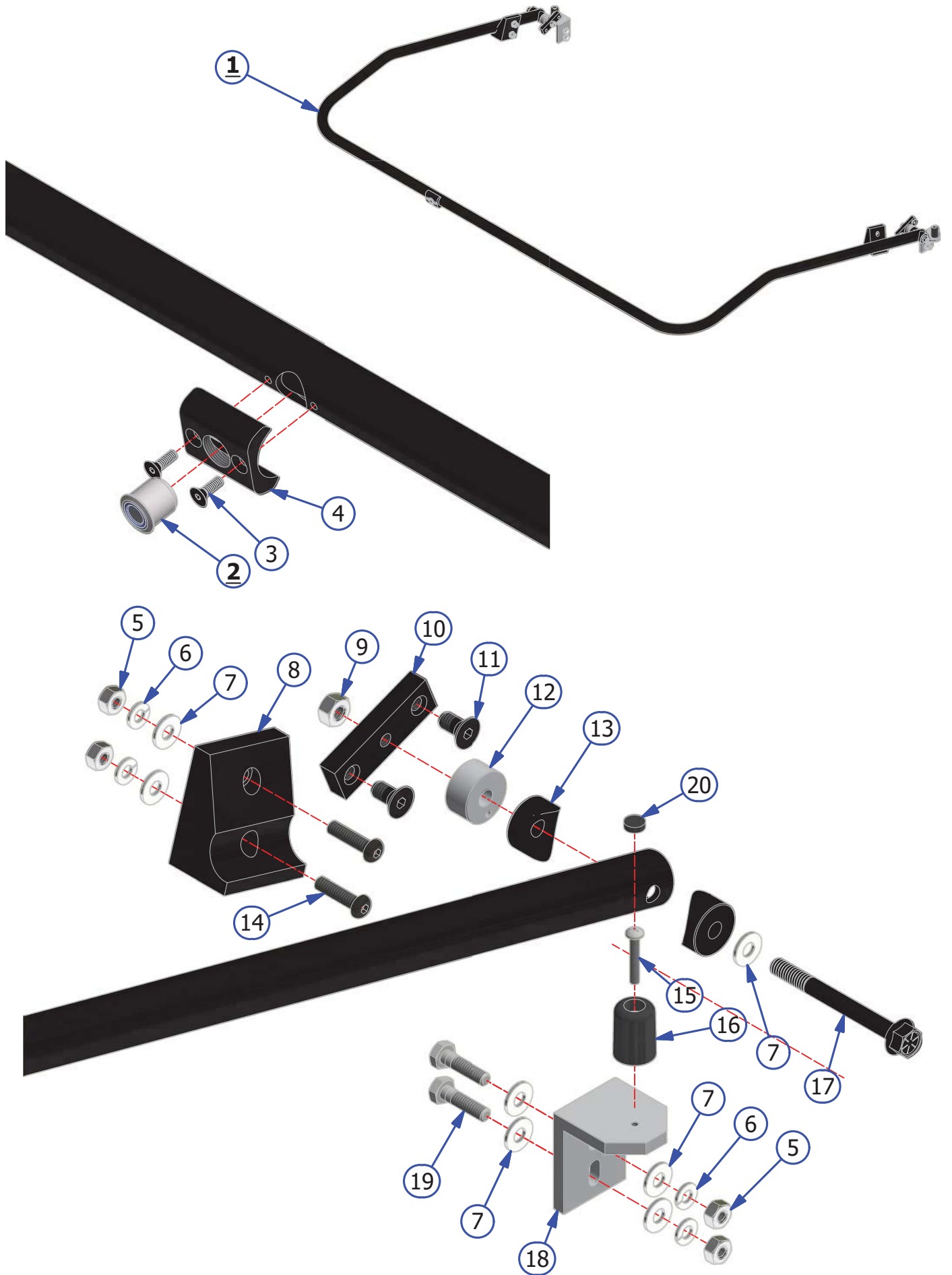




# HANDLE ASSEMBLY - FLEX

REV. 9/17

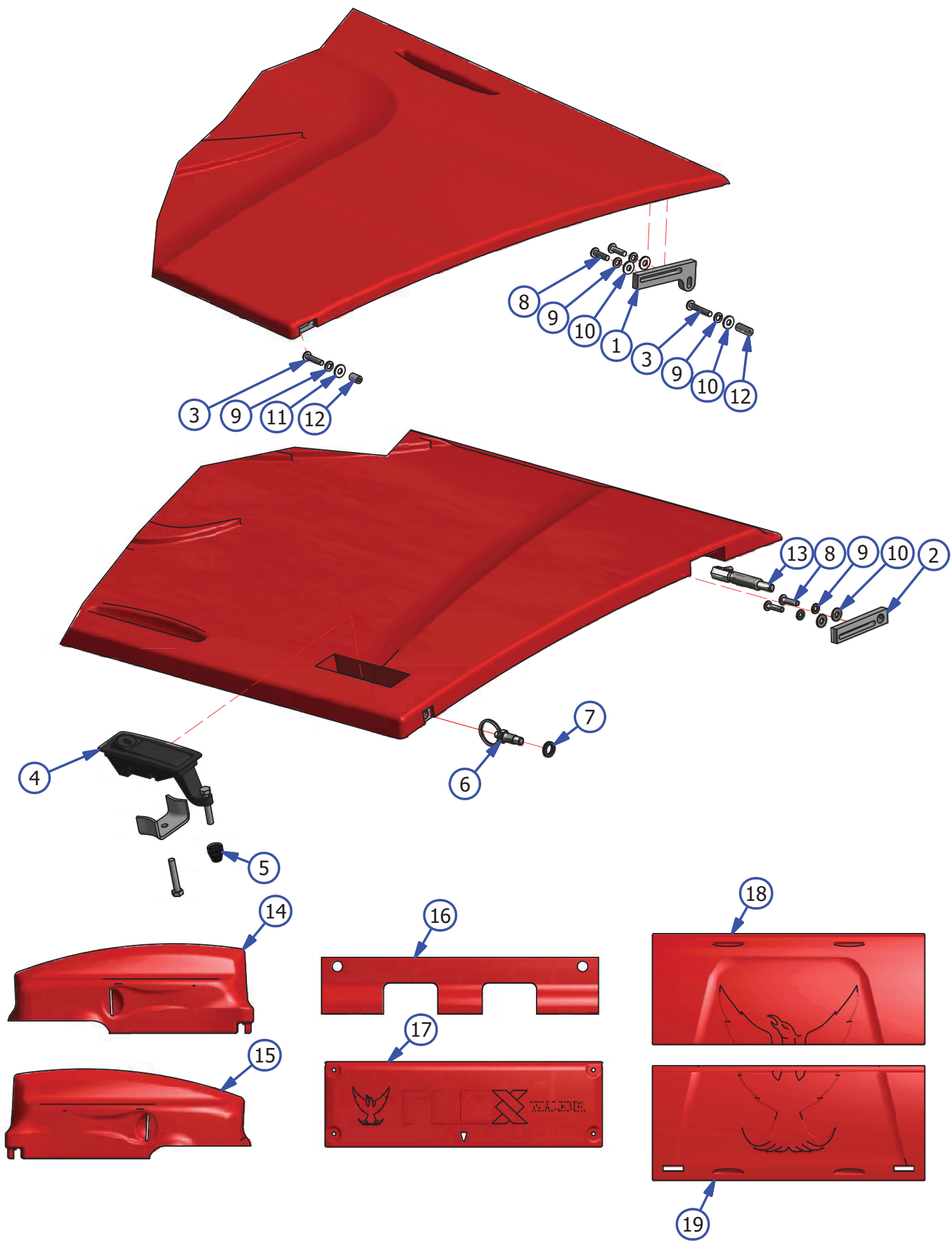
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8012	HANDLE ASSEMBLY (COMPLETE)	EA
2	1	164-8013	HANDLE BUTTON REPLACEMENT ASSEMBLY (W/WIRES)	EA
3	2	158-2003	SCREW 8-32 X 1/2 FHCS BLK OXIDE	EA
4	1	164-6083	BUTTON COLLAR	EA
5	8	153-2023	1/4-20 HEX NUT	EA
6	8	153-2014	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	164-8213	RUBBER BUMPER-3/4 DIA X 1 HIGH	EA
17	2	164-2028	HHSCS 5/16-18 X 3 PARTIAL 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	EA
21	1	164-8006	HANDLE GRIP - 12 INCH	EA



# LID AND COVER ASSEMBLY - FLEX WALKER

REV. 3/16

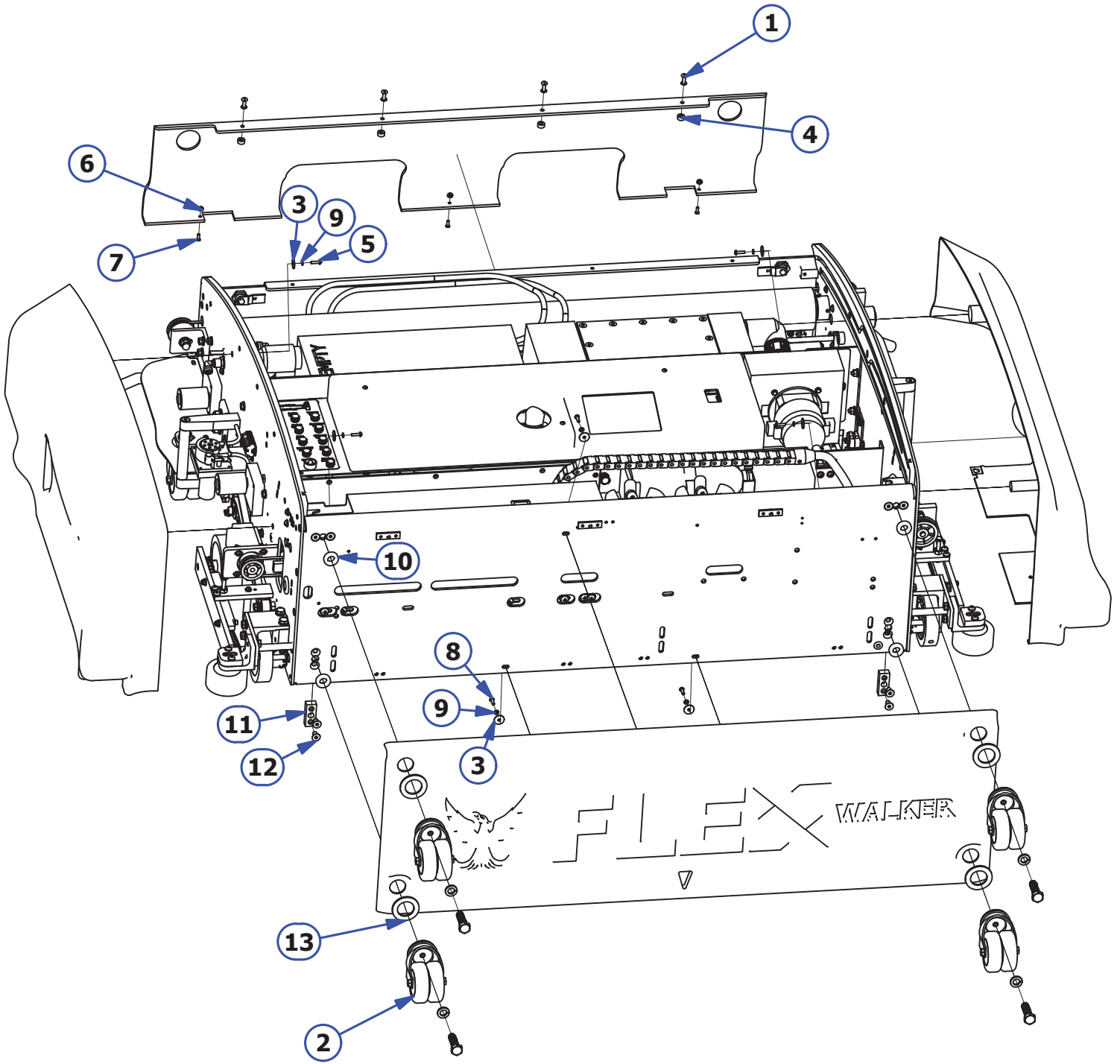
<u>INDEX</u>				
<u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	164-6234	SLIDING LID MOUNT (CLEANING LID)	EA
2	2	164-6233	SLIDING LID MOUNT (CONDITIONING LID)	EA
3	4	164-2072	SHCS 8-32 X 3/4 THREAD LOCKING PATCH	EA
4	2	153-2232L	FLUSH MOUNT LID LATCH (WITH LOCK)	EA
5	2	164-6164	LID LATCH BUMPER	EA
6	2	164-2002	DETENT - SPRING PLUNGER	EA
7	2	164-2041	SHIM FOR SCREW SHOULDER	EA
8	8	153-2086	MS PHILLIPS 8-32 X 5/8	EA
9	12	153-2002	FLAT WASHER #8	EA
10	12	153-2013	LOCK WASHER #10	EA
11	2	164-2044	STANDOFF FEMALE THREADED 8-32 X 3/8	EA
12	2	164-2071	STANDOFF FEMALE THREADED	EA
13	2	164-2069	SPRING PLUNGER THREADED	EA
14	1	164-8232	FLEX WALKER LT SIDE GUARD - WHITE	EA
	1	164-8232-1525	FLEX WALKER LT SIDE GUARD - BLUE	EA
	1	164-8232-2850	FLEX WALKER LT SIDE GUARD - BLACK	EA
	1	164-8232-2911	FLEX WALKER LT SIDE GUARD - RED	EA
15	1	164-8233	FLEX WALKER RT SIDE GUARD - WHITE	EA
	1	164-8233-1525	FLEX WALKER RT SIDE GUARD - BLUE	EA
	1	164-8233-2850	FLEX WALKER RT SIDE GUARD - BLACK	EA
	1	164-8233-2911	FLEX WALKER RT SIDE GUARD - RED	EA
16	1	164-8236	FRONT BUMPER - WHITE	EA
	1	164-8236-1525A	FRONT BUMPER - BLUE	EA
	1	164-8236-2850A	FRONT BUMPER - BLACK	EA
	1	164-8236-2911A	FRONT BUMPER - RED	EA
17	1	164-8049	FLEX BACK PANEL - WHITE	EA
	1	164-8049-1525	FLEX BACK PANEL - BLUE	EA
	1	164-8049-2850	FLEX BACK PANEL - BLACK	EA
	1	164-8049-2911	FLEX BACK PANEL - RED	EA
18	1	164-8230	SLIDING CLEANER COMPARTMENT LID - WHITE	EA
	1	164-8231-2850	SLIDING CLEANER COMPARTMENT LID - BLACK	EA
	1	164-8230-2911	SLIDING CLEANER COMPARTMENT LID - RED	EA
	1	164-8230-1525	SLIDING CLEANER COMPARTMENT LID - BLUE	EA
19	1	164-8231	SLIDING LID ASSEMBLY - WHITE	EA
	1	164-8231-2850	SLIDING LID ASSEMBLY - BLACK	EA
	1	164-8231-2911	SLIDING LID ASSEMBLY - RED	EA



# PANEL EXPLOSION - FLEX WALKER

REV. 9/17

<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	4	164-2066	BINDING POST	EA
2	4	164-8814	TRANSPORT CASTER ASSEMBLY - COMPLETE	EA
	4	153-0001BK	TRANSPORT CASTER - CASTER ONLY	EA
	4	153-2017	1/2 LOCKWASHER	EA
	4	164-2039	HHCS 1/2-13 X 1 3/4 GRADE 5	EA
3	9	153-2953	FENDER WASHER - #8	EA
4	4	164-2038	RUBBER BUMPER SBR	EA
5	4	153-2087	MS PHILLIPS - 8-32 X 3/4	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	4	164-2084	WASHER - OVERSIZED 1/2"	EA
11	4	164-6252	TRANSPORT CASTER MOUNT	EA
12	8	153-2802	FHSS - 5/16-18 X 5/8"	EA
13	4	164-2080	FELT WASHER (BLACK)	EA

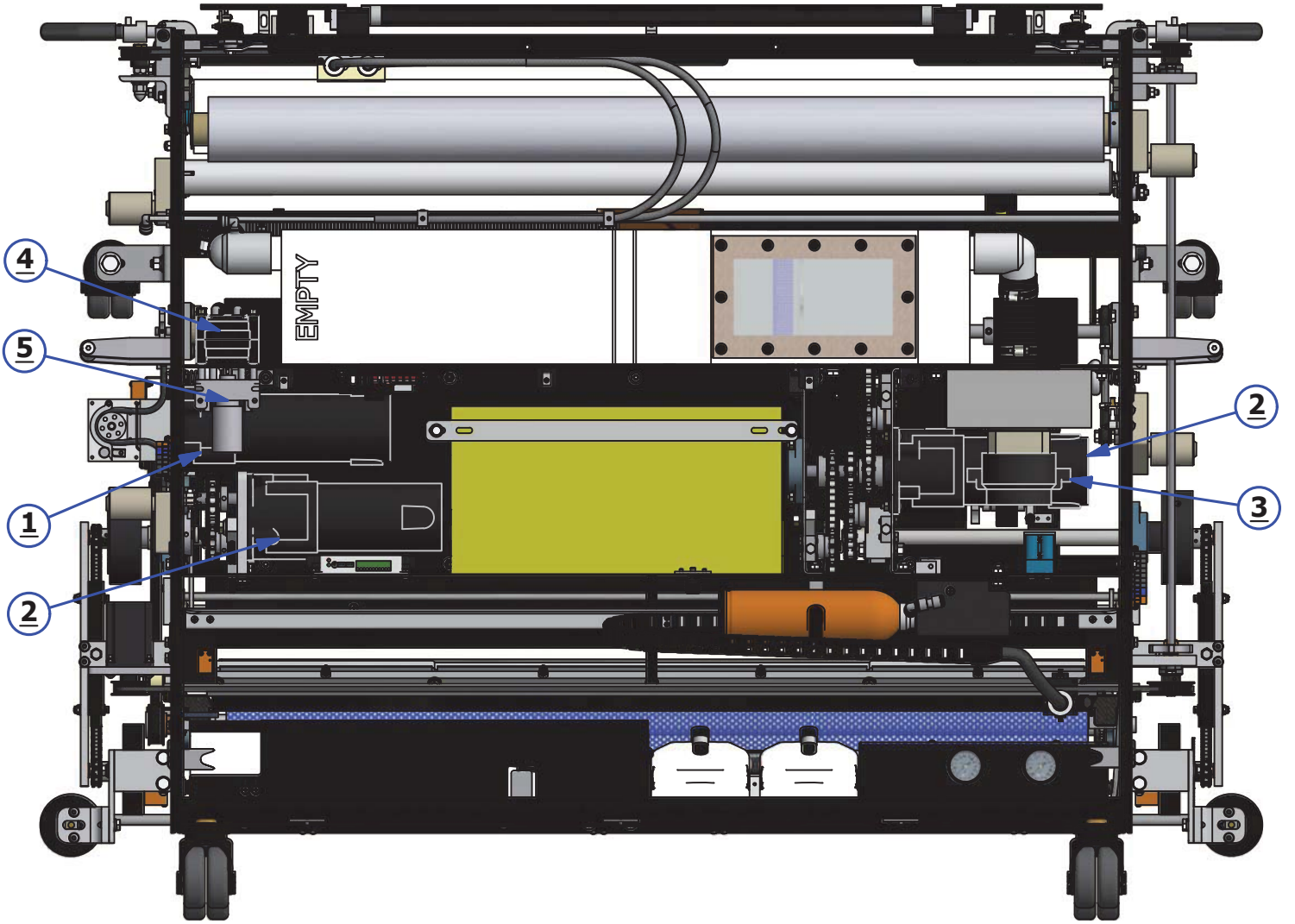


# TOP VIEW - FLEX WALKER

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
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

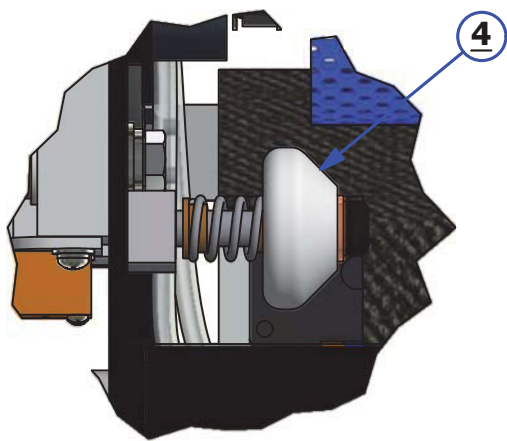
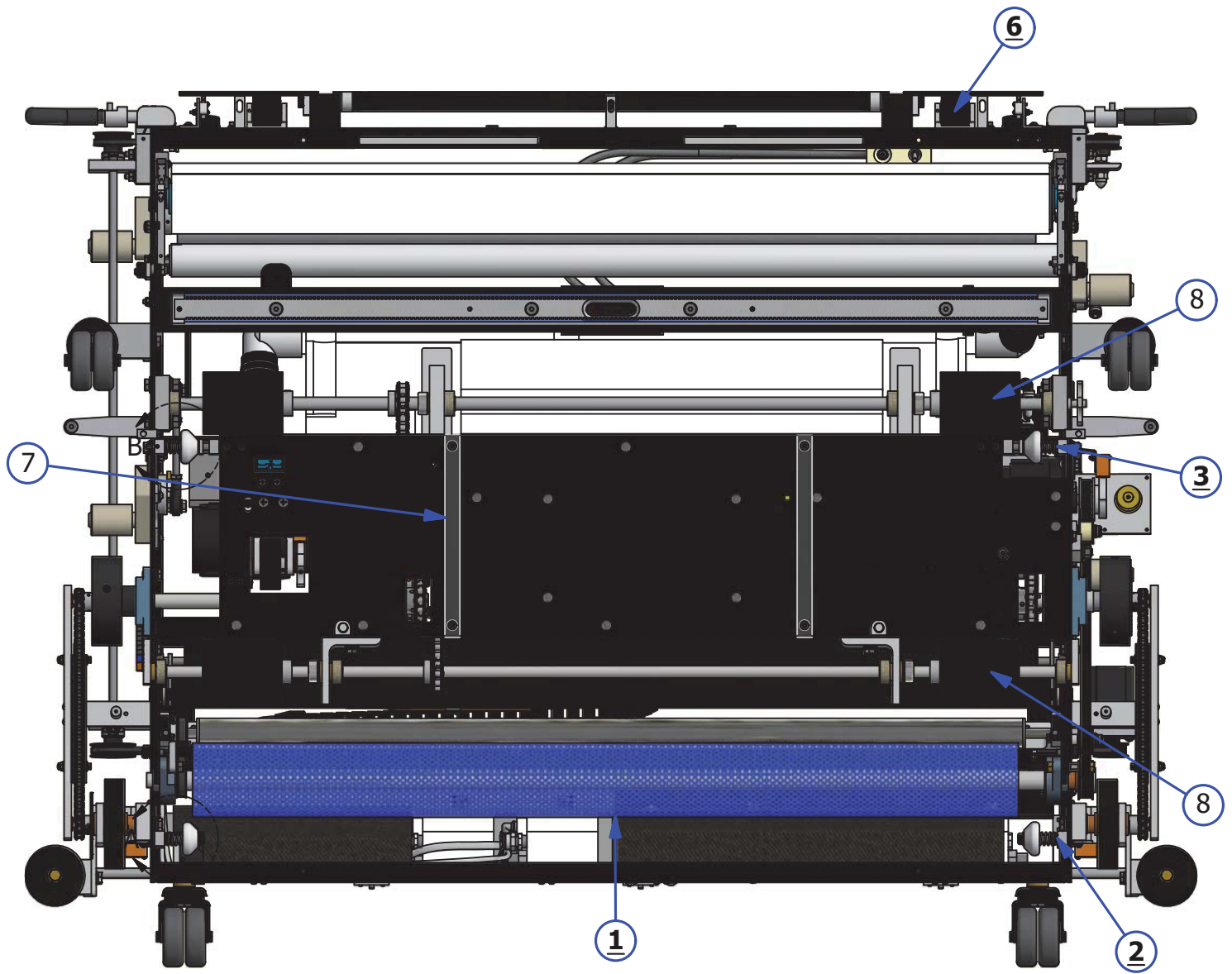




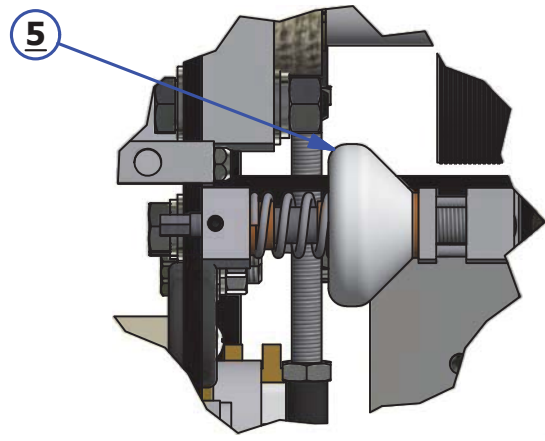
# BOTTOM - FLEX WALKER

REV. 9/17

<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8001A	BUFFER BRUSH ASSEMBLY	EA
	1	164-9016	BUFFER BELT ASSEMBLY NON-VARIABLE	EA
	1	154-9617	BUFFER BELT ASSEMBLY - VARIABLE BUFF	EA
2	2	164-8815	bottom	EA
	2	153-2407	SHOULDER BOLT 3/8 X 1 3/4	EA
	2	153-2978	SPRING - COMPRESSION FOR GUIDE WHEEL	EA
	2	164-8816	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	164-6053	MOMENTARY WHEEL HOUSING ASSEMBLY	EA
7	2	153-9803	SKID GUIDE	EA
8	4	153-7013	DRIVE WHEEL ASSEMBLY	EA



DETAIL A

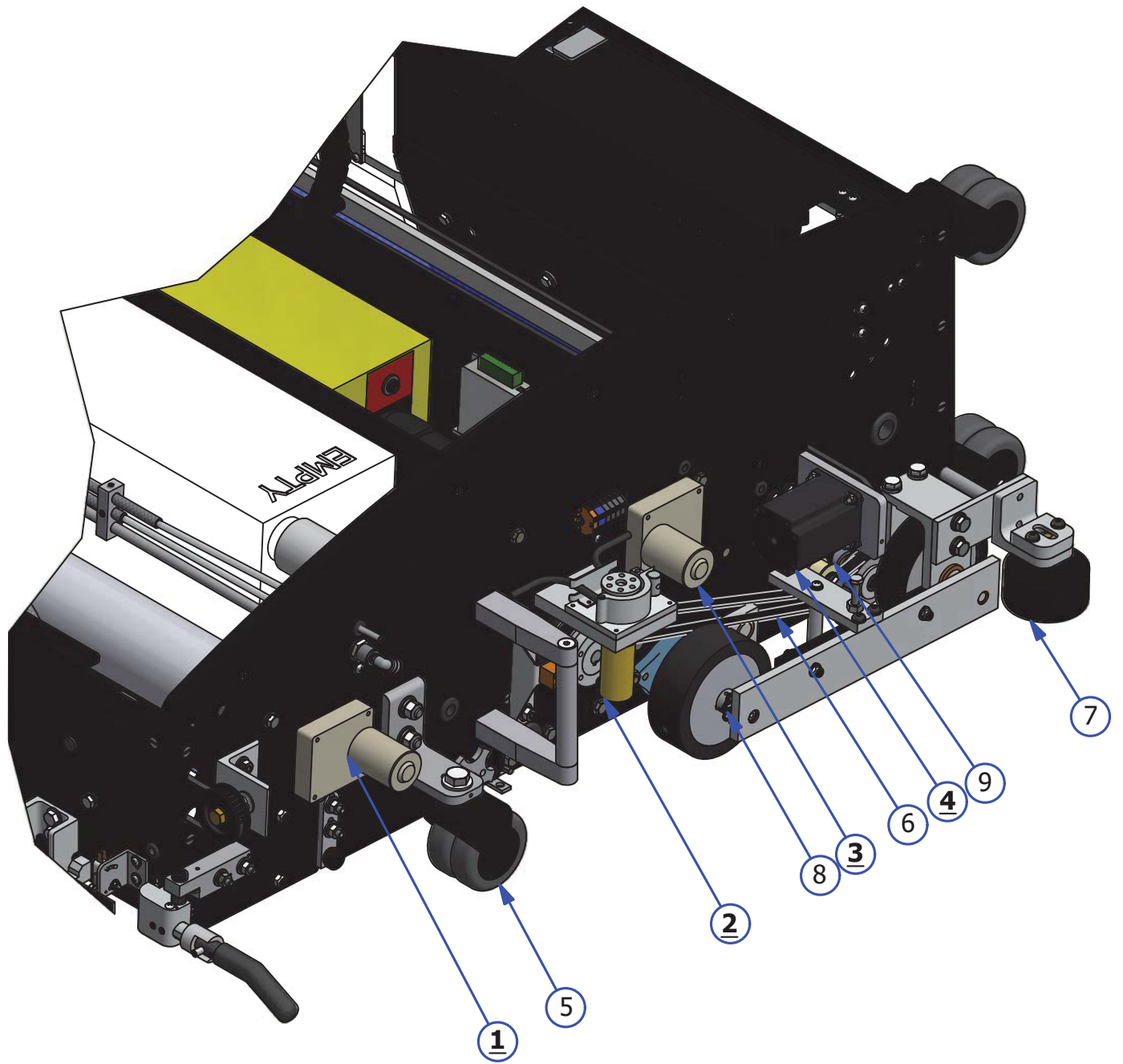


DETAIL B

# LEFT SIDE - FLEX WALKER

REV. 1/16

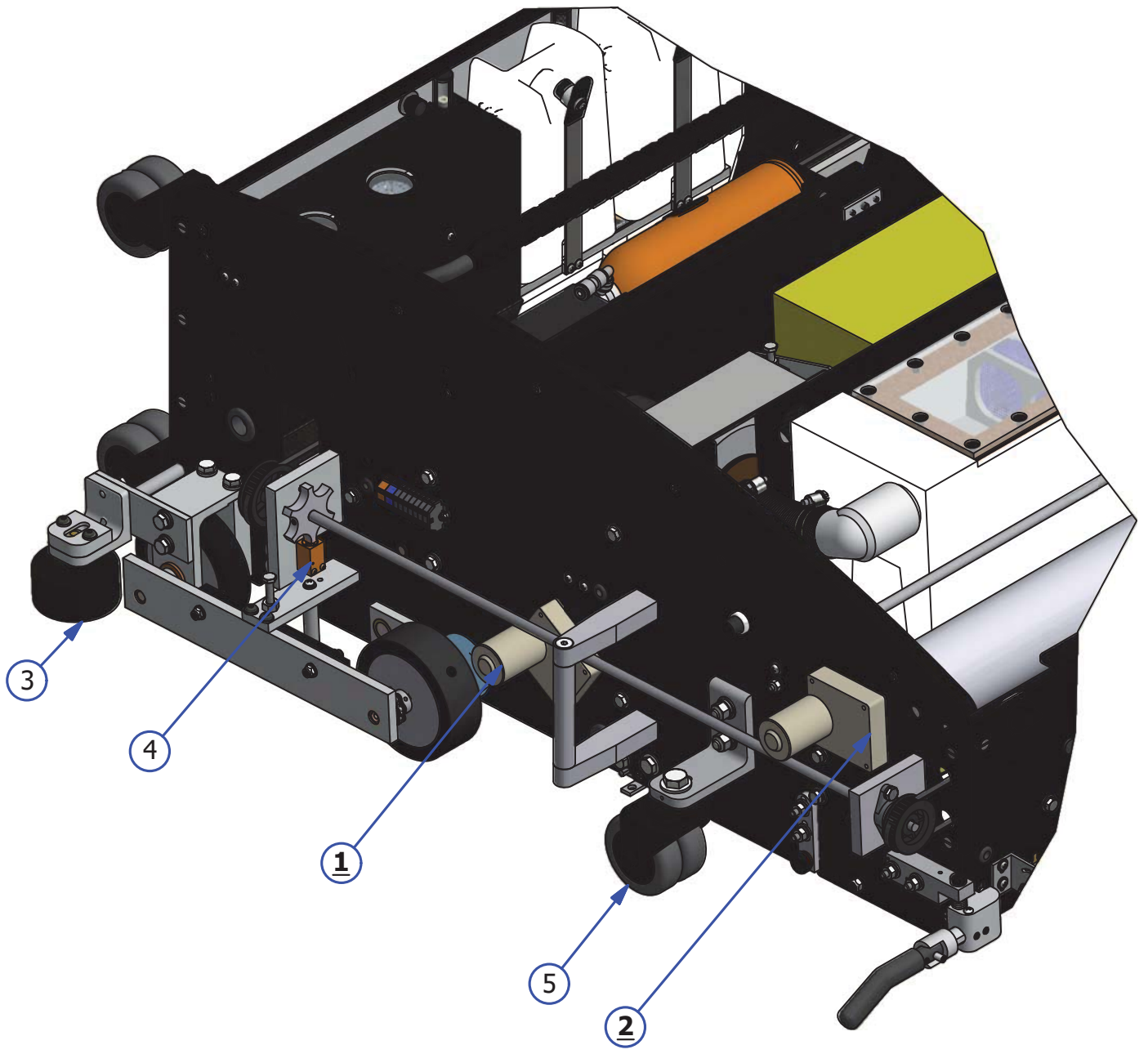
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	158-8403	ASSEMBLY - DUSTER MOTOR 24VDC	EA
2	1	164-8027	CLEANER PUMP ASSEMBLY - CONCENTRATE (UPGRADE ONLY)	EA
		164-8025	CLEANER TUBING #14 FOR SUPER CONCENTRATE	EA
		164-8026	CLEANER TUBING #16 FOR REG CONCENTRATE	EA
3	1	158-8402	BUFFER LOWERING MOTOR	EA
4	1	164-8032	HEAD DRIVE MOTOR ASSEMBLY	EA
5	6	153-0001BK	CASTER ASSEMBLY (3 INCH DUAL WHEEL)- BLACK	EA
6	1	164-9016	BUFFER BELT ASSEMBLY - STANDARD	EA
	1	164-9017	BUFFER BELT ASSEMBLY - VARIABLE BUFF UPGRADE	EA
7	2	153-7203	BUMPER WHEEL ASSEMBLY	EA
8	1	164-9005	#35 CHAIN ZTR KICKUP	EA
	1	153-9046	MASTER LINK #35 (NOT SHOWN)	EA
9	1	153-8039	BUFFER IDLER PULLEY	EA



# RIGHT SIDE - FLEX WALKER

REV. 1/16

<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART 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

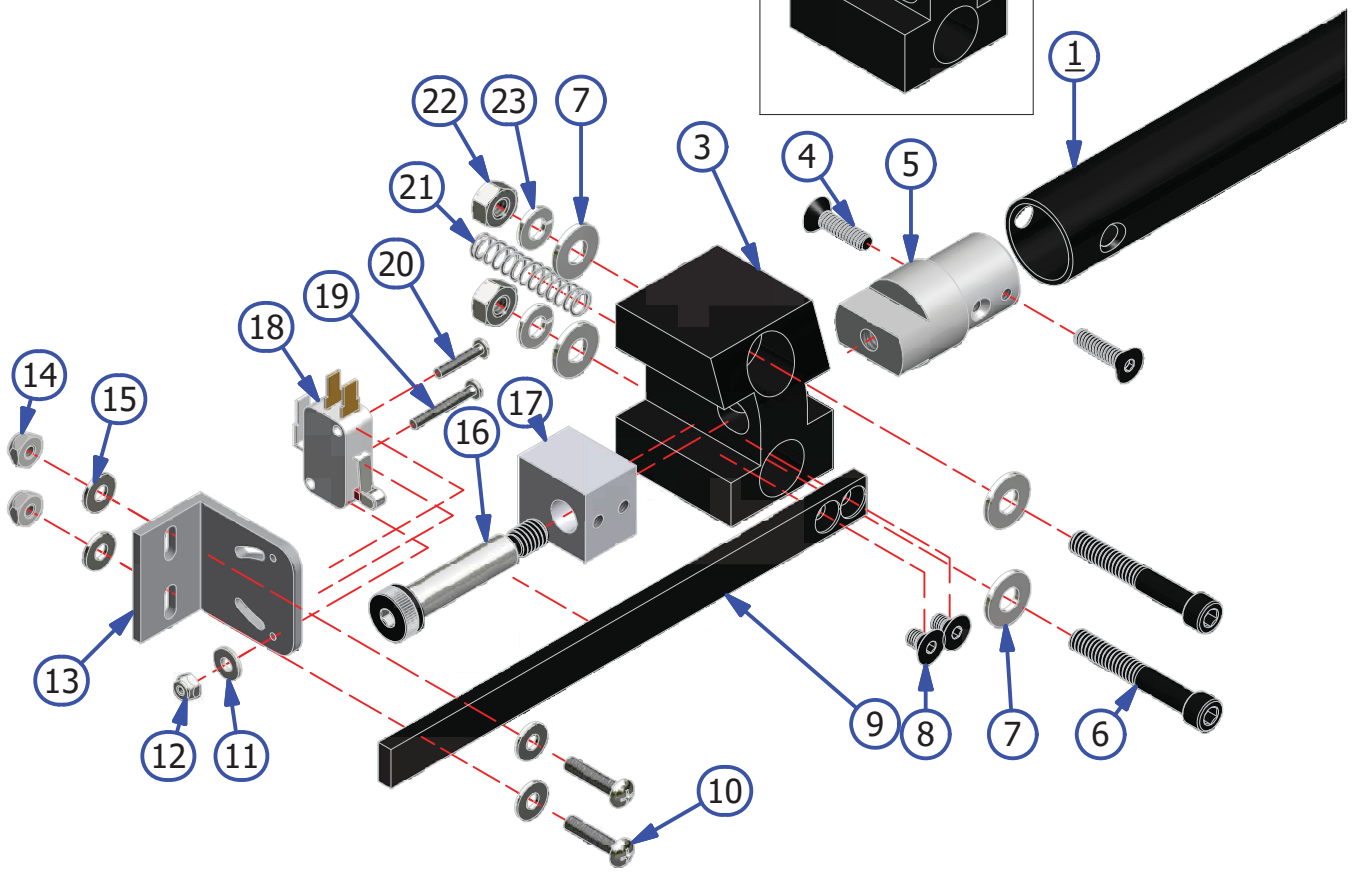
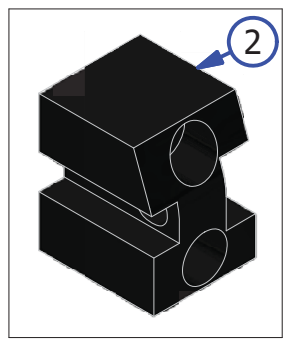


# FRONT HANDLE ASSEMBLY - FLEX WALKER

REV. 1/16

<u>INDEX</u>				
<u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8073	FRONT HANDLE ASSEMBLY	EA
2	1	164-6069	FLEX FRONT HANDLE BLOCK (LT)	EA
3	1	164-6068	FLEX FRONT HANDLE BLOCK (RT)	EA
4	4	153-2996	SCREW - FHCS 10-24 X 3/4 BLACK OXIDE	EA
5	2	164-6072	FRONT HANDLE PLUG	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

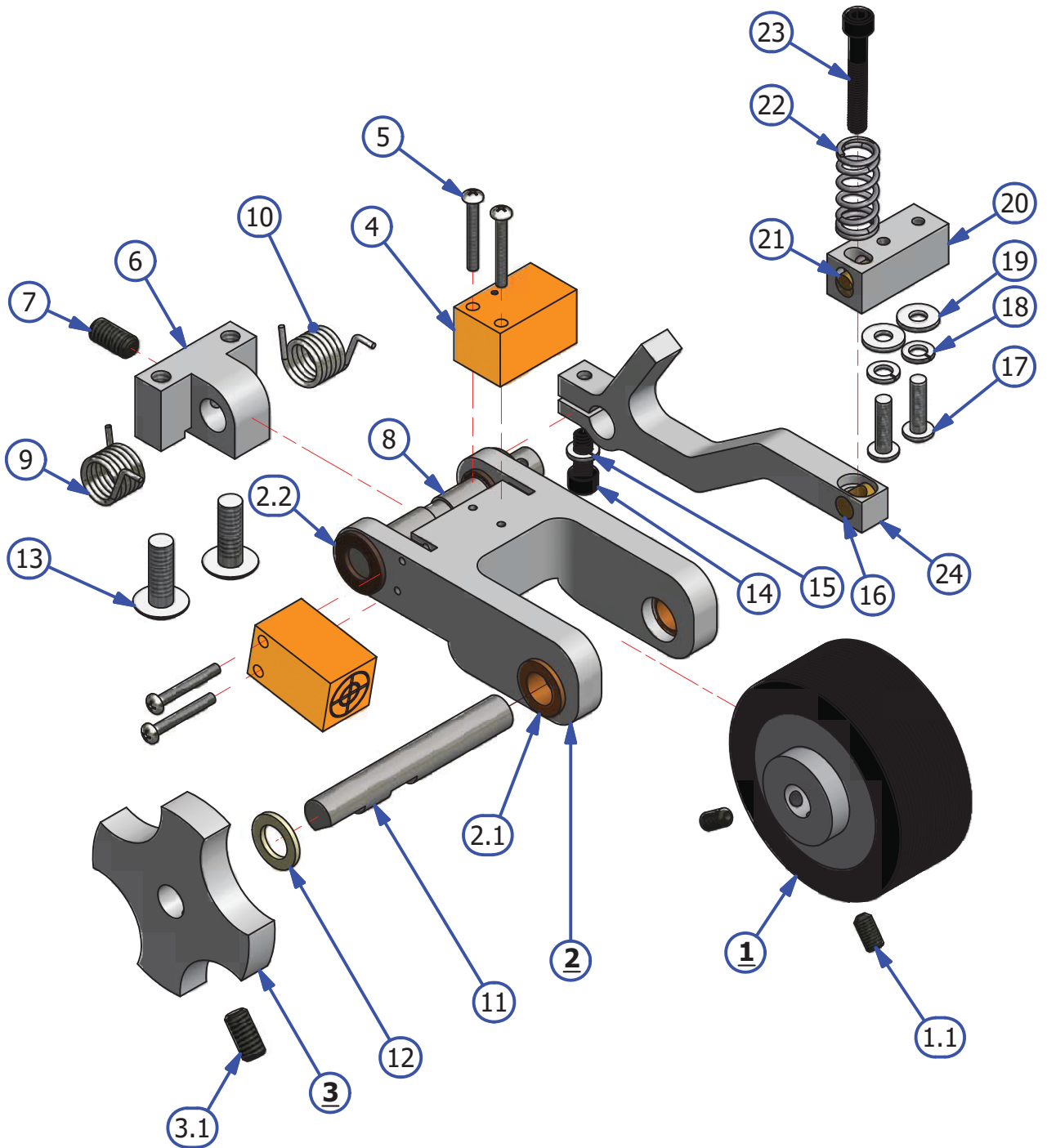




# LDS ASSEMBLY - FLEX WALKER

REV. 9/17

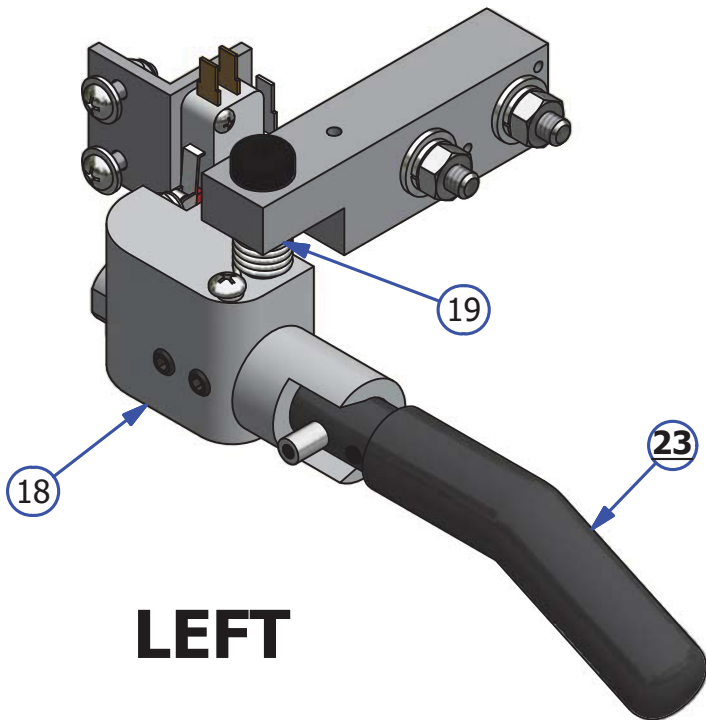
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-7001	LDS WHEEL ASSEMBLY	
1.1	2	153-2201	SET SCREW - 10-32 X 3/8	EA
2	1		LDS ARM ASSEMBLY	EA
2.1	2	153-9803	FLANGED BUSHING (3/8 X 1/2 X 1/4)	EA
2.2	2	154-9617	FLANGED BUSHING (3/8 x 1/2 x 3/8)	EA
3	1		FLEX LDS DISK	EA
3.1	1	153-2051	SET SCREW - 1/4-20 X 1/2	EA
4	2	154-1220	INDUCTIVE PROXIMITY SENSOR (TL-Q5MC1)	EA
5	2	153-2216A	MS PHILLIPS - 4-40 X 7/8	EA
6	1	164-6128	LDS ARM MOUNT	EA
7	1	153-2051	SET SCREW - 1/4-20 X 1/2	EA
8	1	164-6129	LDS ARM SHAFT	EA
9	1	153-2944	TORSION SPRING - RH	EA
10	1	153-2945	TORSION SPRING - LH	EA
11	1	164-6130	LDS WHEEL SHAFT	EA
12	1	153-2009	NYLON FLAT WASHER (3/8 - 0.060)	EA
13	2	153-2052A	MS PHILLIPS - 1/4-20 X 3/4 TRUSS HEAD	EA
14	1	153-2121	OXIDE ALLOY STL SHCS 10-24 X 1/2	EA
15	2	153-2013	LOCK WASHER #10	EA
16	1	164-6207	BRASS THREAD ROD	EA
17	2	153-2086	MS PHILLIPS 8-32 X 5/8	EA
18		153-2013	LOCK WASHER #10	EA
19	2	153-2002	FLAT WASHER #8	EA
20	1	164-6205	OLS ACTUATOR MOUNT	EA
21	1	164-6206	BRASS THRU ROD	EA
22	1	153-2093	SPRING - .42 OD X .75	EA
23	1	164-2059	SHCS 10-32 X 1 1/4	EA
24	1	164-6204	OLS ACTUATOR	EA



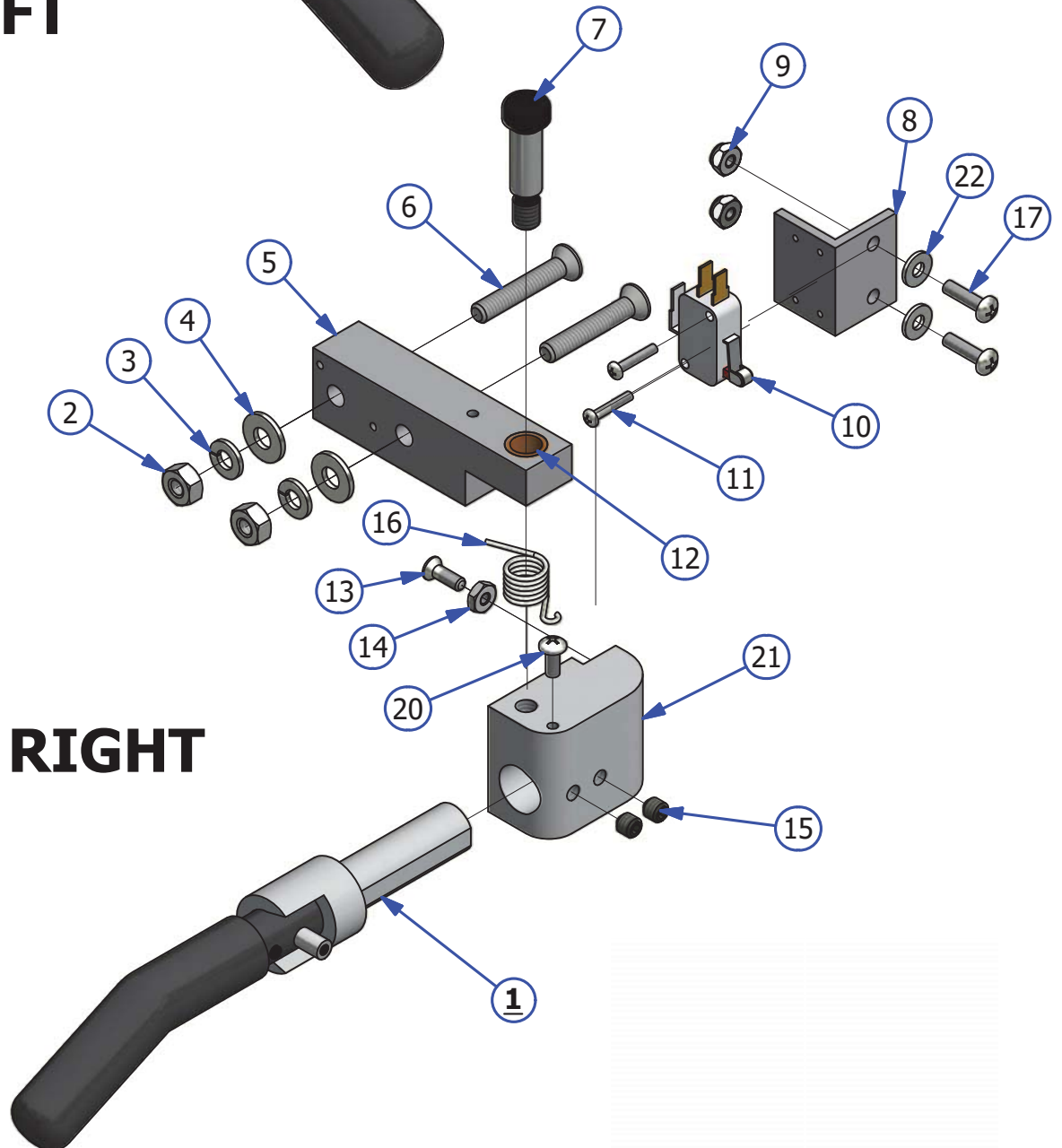
# WHISKER ASSEMBLY

REV. 9/17

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8825	RIGHT WHISHER 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	4	153-2051A	SET SCREW - 1/4-20 X 1/4	EA
16	1	153-2944	TORSION SPRING - RIGHT	EA
17	4	153-2086	MS PHILLIPS - 8-32 X 5/8	EA
18	1	164-6181	WHISKER SPRING MOUNT BLOCK - LEFT	EA
19	1	153-2945	TORSION SPRING - LEFT	EA
20	2	153-2086A	MS PHILLIPS - 8-32 X 3/8	EA
21	1	164-6182	WHISKER SPRING MOUNT BLOCK - RIGHT	EA
22	4	153-2002	FLAT WASHER #8	EA
23	1	164-8824	LEFT WHISKER ASSEMBLY	EA



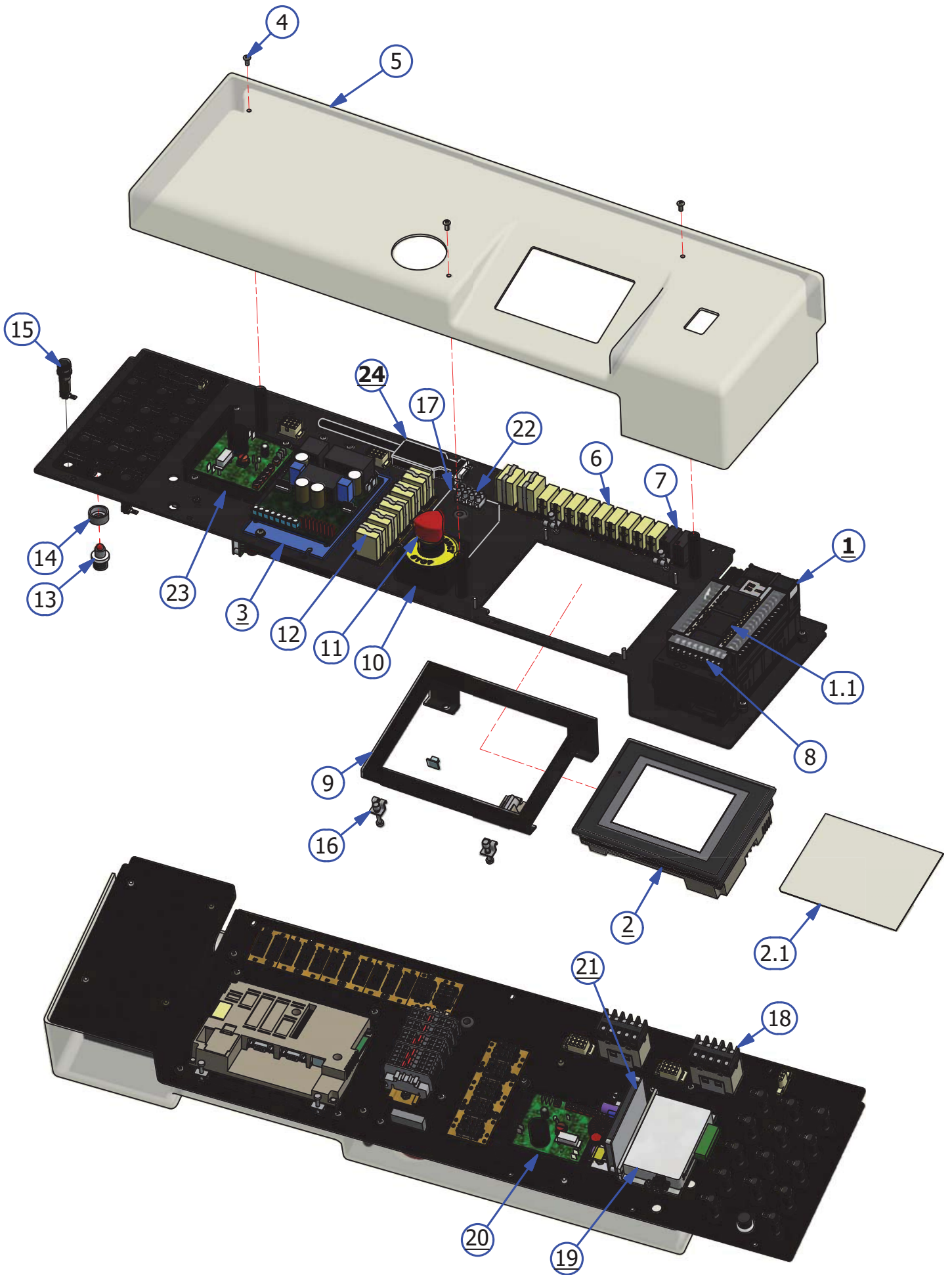
**LEFT**



**RIGHT**

# PLC PLATE ASSEMBLY

<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
<b>1</b>	1	158-1610P	PLC FOR FLEX - SPECIFY SOFTWARE VERSION	EA
1.1	1	158-1610S	SERIAL CONVERTER FOR FLEX	EA
	1	158-1610D	CABLE TO TOUCHSCREEN - 24IN (NOT SHOWN)	EA
<b>2</b>	1	164-8011	TOUCH SCREEN ASSEMBLY	EA
2.1	1	158-1612	SCREEN PROTECTOR	EA
<b>3</b>	1	164-8010	SPEED CONTROL ASSEMBLY - DRIVE	EA
4	7	153-2086A	MS PHILLIPS - 8-32 X 3/8	EA
5	1	164-6062	CLEAR PC PLATE COVER	EA
<b>6</b>	6	158-1458	RELAY - OMRON 24DC DPDT GENERAL PURPOSE	EA
6.1	6	164-1204	RELAY BASE FOR RELAY 158-1458	EA
<b>7</b>	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
<b>11</b>	1	164-8223	E-STOP SWITCH ASSEMBLY	EA
11.1	1	164-1223B	BREAKER FOR ESTOP	EA
<b>12</b>	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		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
23	1	164-8225	SPEED CONTROL ASSEMBLY - BUFFER DRIVE	EA
24	1	164-8220	WIFI ADAPTER	EA
	1	164-1239	COMMUNICATION CABLE	EA

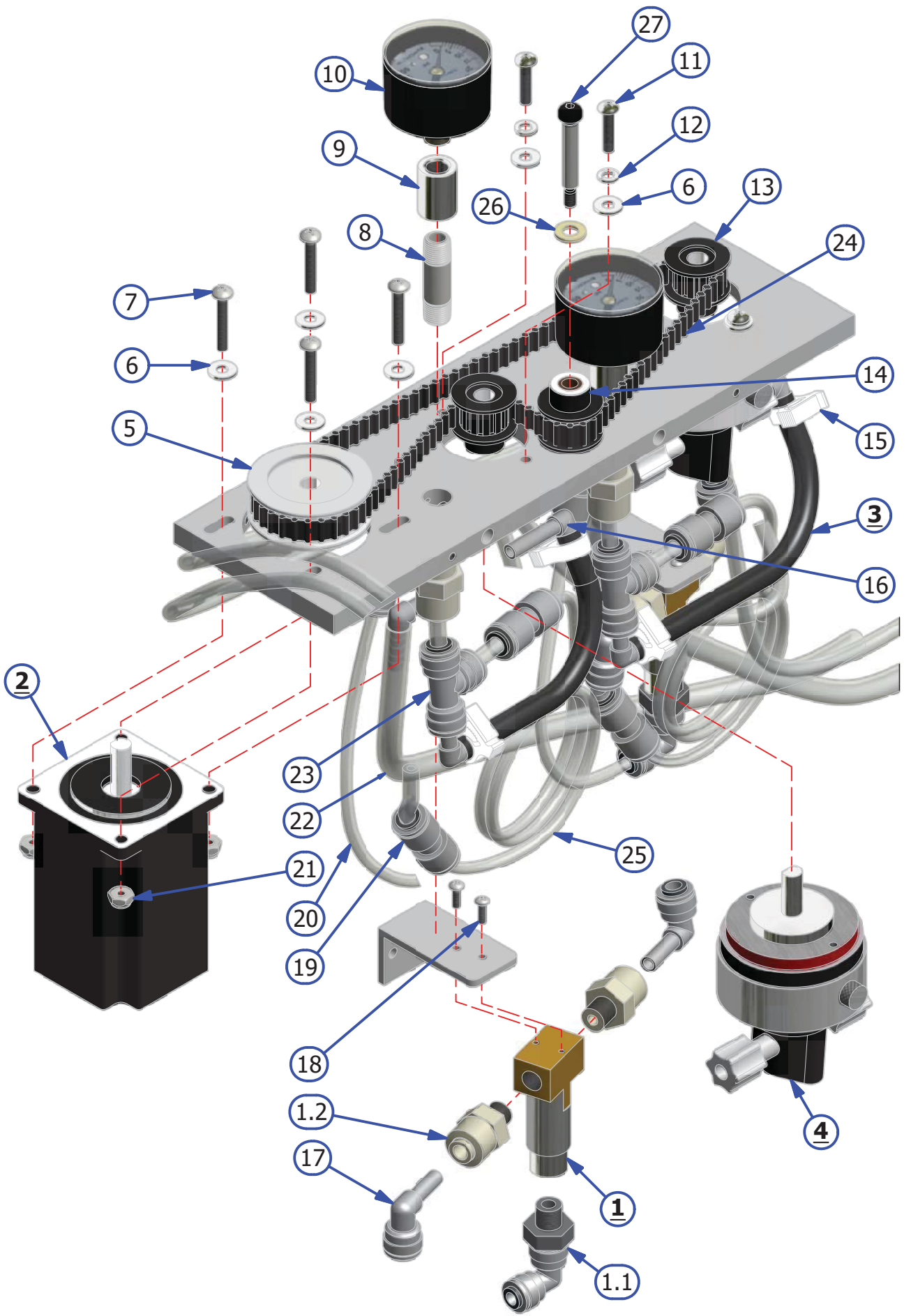


# OIL VALVE ASSEMBLY

REV. 2/16

<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 EXTENEDED WIRES	EA
1.1	2	154-0613	ELBOW - 1/8 NPT X 3/16 TUBE	EA
1.2	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 SUPRESSION TUBE	EA
4	2	154-1214	FLUID METERING PUMP-0.05 ML/STROKE	EA
5	1	158-9403	PULLEY - 26XL037 X 5/16" BORE	EA
6	8	153-2002	#8 FLATWASHER	EA
7	4	153-2089	MS PHILLIPS - 8-32 X 1	EA
8	2	164-0207	PIPE NIPPLE - THREADED BLK - 1/8 X 1 1/2	EA
9	2	154-0230	IN-LINE COUPLER (1/8 NPT) FLOAT	EA
10	2	158-1613	PRESSURE GAUGE - 60PSI	EA
11	4	153-2087	MS PHILLIPS - 8-32 X 3/4	EA
12	4	153-2013	#10 LOCKWASHER	EA
13	2	154-9208	PULLEY - 12XL - 5/16" BORE W/SET SCREW	EA
14	1	164-8029	OIL PUMP IDLER ASSEMBLY	EA
15	4	164-2046	HOSE CLAMP	EA
16	6	154-0226	ELBOW - TUBE TO HOSE BARB (1/4 X 1/4 ID)	EA
17	4	154-0222	ELBOW - 1/4" STEM X 1/4" TUBING OD	EA
18	4	153-2504	MS PHILLIPS - 4-40 X 3/8	EA
19		154-0248	REDUCING UNION CONNECTOR-1/4" X 3/16"	EA
20	1	154-0202A	PENCIL TUBING STOCK 1/4OD X 1/8ID	IN
21	4	153-2019	LOCKNUT - 8-32 (NYLOK)	EA
22	1	154-0202	PENCIL TUBING STOCK 3/8OD X 1/4ID	IN
23	2	153-0815	UNION TEE (1/4 X 1/4 X 1/4 - QUICK DISC)	EA
24	1	164-9008	TIMING BELT DOUBLE SIDED (220XL038	EA
25	1	154-0202B	PENCIL TUBING STOCK - 3/16 OD X 1/16 ID	IN
26	1	153-2510	NYLON WASHER - 1/4	EA
27	1	153-2803	SHOULDER BOLT - 1/4 X 1-1/4 (10-24)	EA

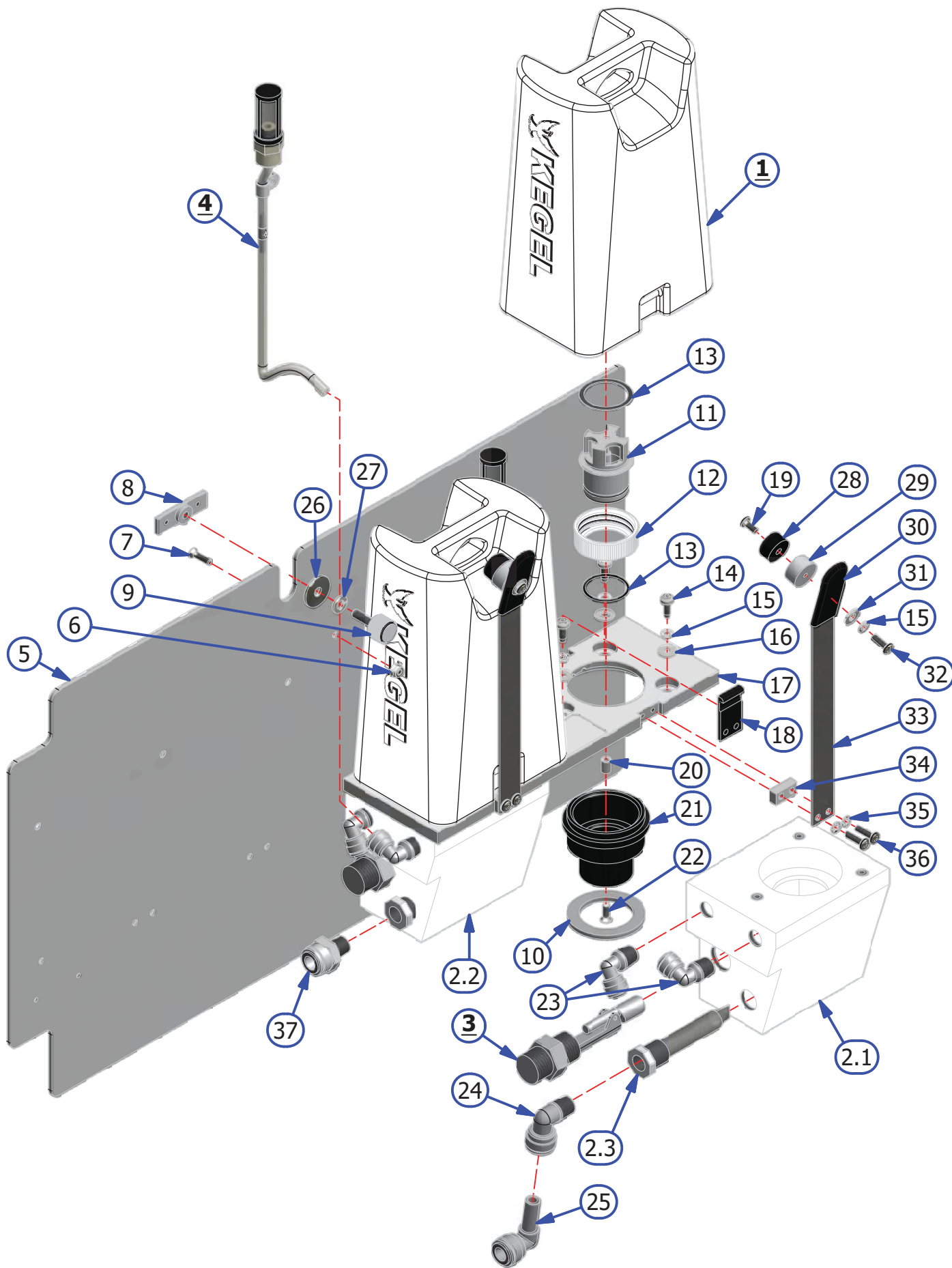




# SUB TANK CARTRIDGE ASSEMBLY

REV. 3/16

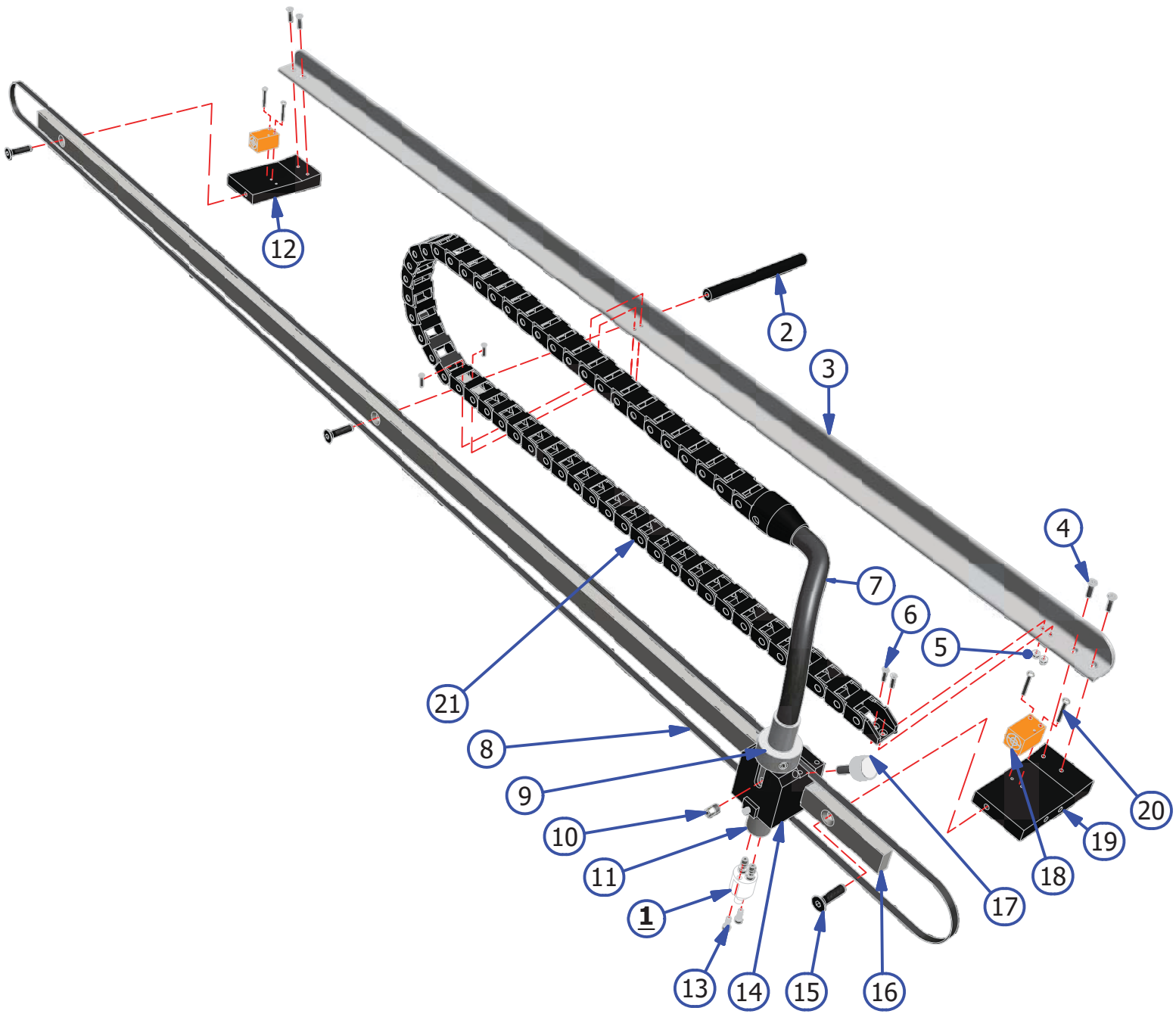
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	2	164-8015	FLEX 1.5L CARTRIDGE	EA
	1	164-8015A	CARTRIDGE ONLY (NO PLUNGER ASSEMBLY)	EA
2.1	1	164-6015A	FLEX CONDITIONER SUB TANK A	EA
2.2	1	164-6015B	FLEX CONDITIONER SUB TANK B	EA
2.3	2	154-0212	CONDITIONER 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	164-8015P	CARTRIDGE VALVE ASSY	EA
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		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	164-8086	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	164-8020	CARTRIDGE CLAMP ASSEMBLY	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



# OIL HEAD ASSEMBLY

REV. 2/16

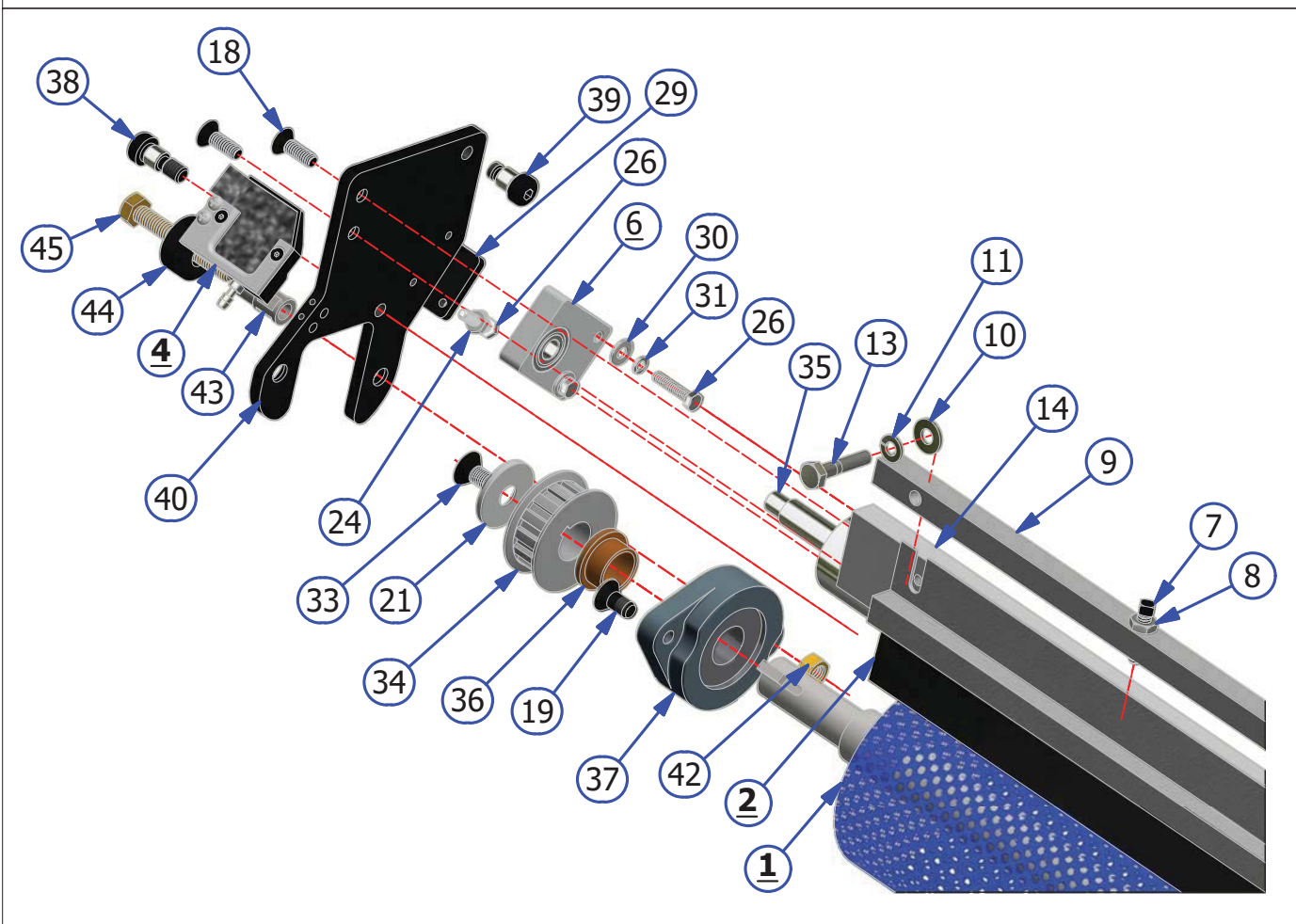
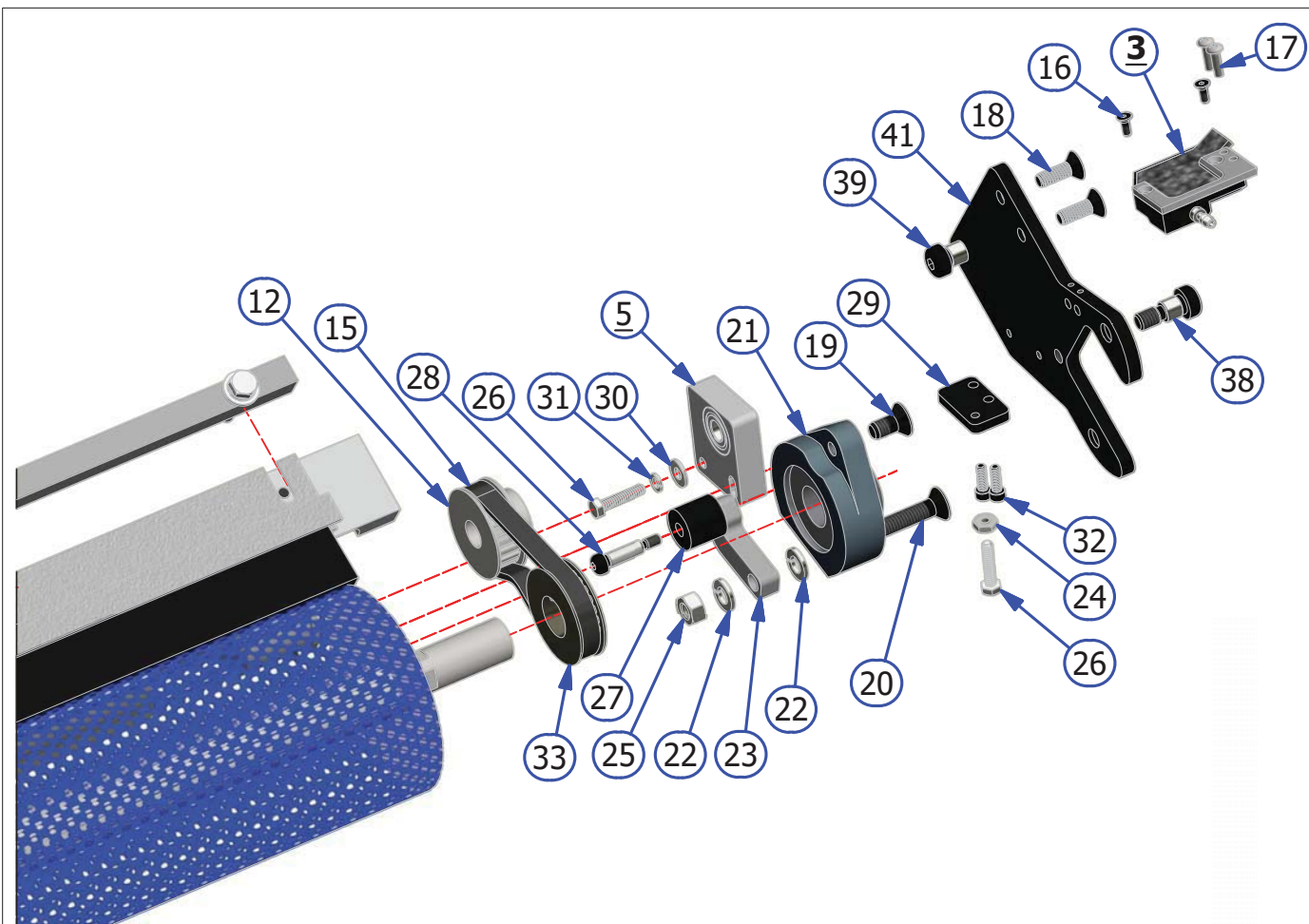
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8051	DUAL OIL TIP WITH FITTINGS	EA
2	1	164-6046	FLEX HEAD BAR SUPPORT	EA
3	1	164-6104	OIL TIP HOSE ANGLE	EA
4	5	153-2806	FLAT HEAD PHILLIPS - 8-32 X 5/8	EA
5	4	153-2231	LOCKNUT - 4-40	EA
6	4	153-2724	FHMS PHILLIPS - 4-40 X 1/2	EA
7	1	164-8023	OIL TUBE SLEEVE	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

REV. 9/17

<u>INDEX</u>		<u>PART</u>		<u>DESCRIPTION</u>	<u>UOM</u>
<u>NUMBER</u>	<u>QTY.</u>	<u>NUMBER</u>			
1	1	164-8001A		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
	1	154-0228S		FELT MATERIAL	EA
4	1	164-8018		FLEX LEFT DRIP PAD ASSEMBLY	EA
	1	154-0228S		FELT MATERIAL	EA
5	1	164-8045		BEARING MOUNT ASSEMBLY - RIGHT	EA
5.1	1	153-2309		BEARING ASSEMBLY 3/8 SHAFT	EA
6	1	164-8046		BEARING MOUNT ASSEMBLY - LEFT	EA
6.1	1	153-2309		BEARING ASSEMBLY 3/8 SHAFT	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		154-9203		BELT FOR TRANSFER ROLLER	EA
16	4	153-2831		SCREW - 6/32 X 3/8 FHCS	EA
17	4	153-2081		MS PHILLIPS - 6-32X 1/2"	EA
18	4	153-2968		SCREW - 1/4-20 X 3/4 FHSHCS	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	1	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	2	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 KWY	EA
34	1	158-9402		PULLEY FOR BUFFER BRUSH ASSEMBLY	EA
35	1	164-8008		TRANSFER ROLLER ASSEMBLY	EA
36	1	158-9601		FLANGED BUSHING	EA
37	1	153-9816		FLANGED BUFFER BRUSH BEARING ASSEMBLY	EA
38	2	153-2801		SHOULDER BOLT - 3/8 X 3/8 (5/16-18)	EA
39	2	153-2801A		SHOULDER BOLT CUT - 3/8 X 3/8 (5/16-18)	EA
40	1	164-6013		LEFT BEARING MOUNT	EA
41	1	164-6014		RIGHT BEARING MOUNT	EA
42	1	162-2032		LOCKNUT CENTERLOCK 5/16-18	EA
43	1	164-6166		CONCENTRIC IDLER SLEEVE	EA
44	1	164-6165		BELT SLACK CONTROL IDLER	EA
45	1	164-2079		HHCS 5/16 X 2 1/4	EA

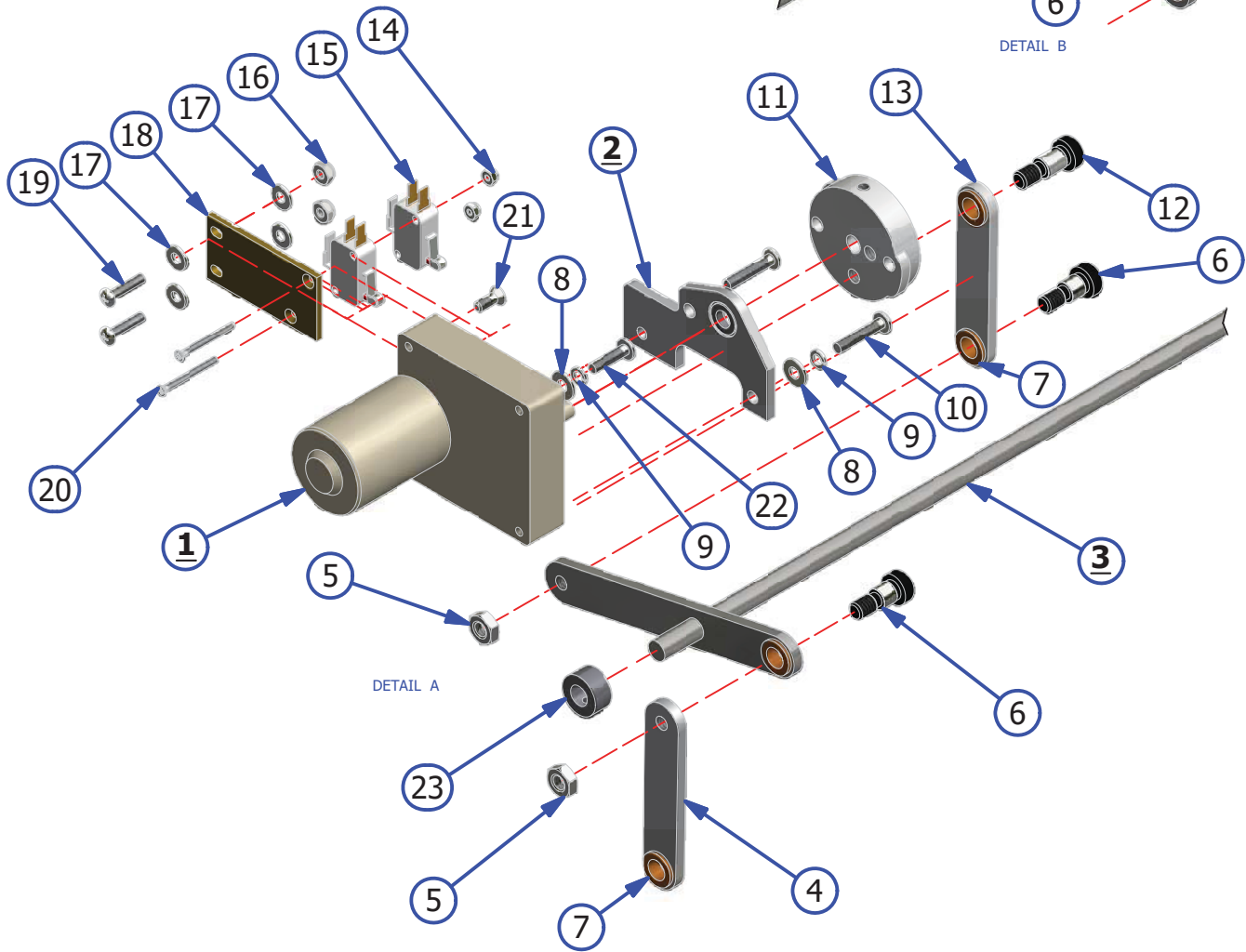
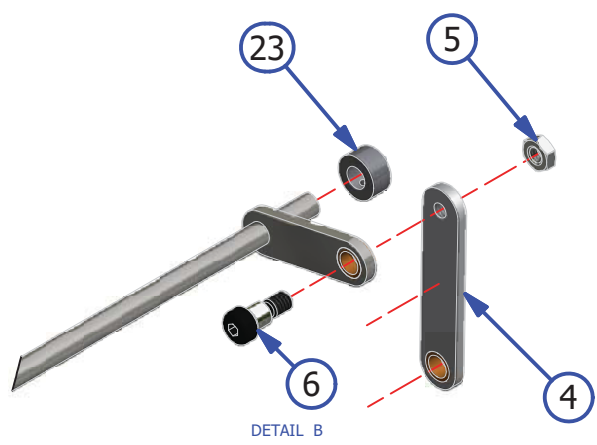
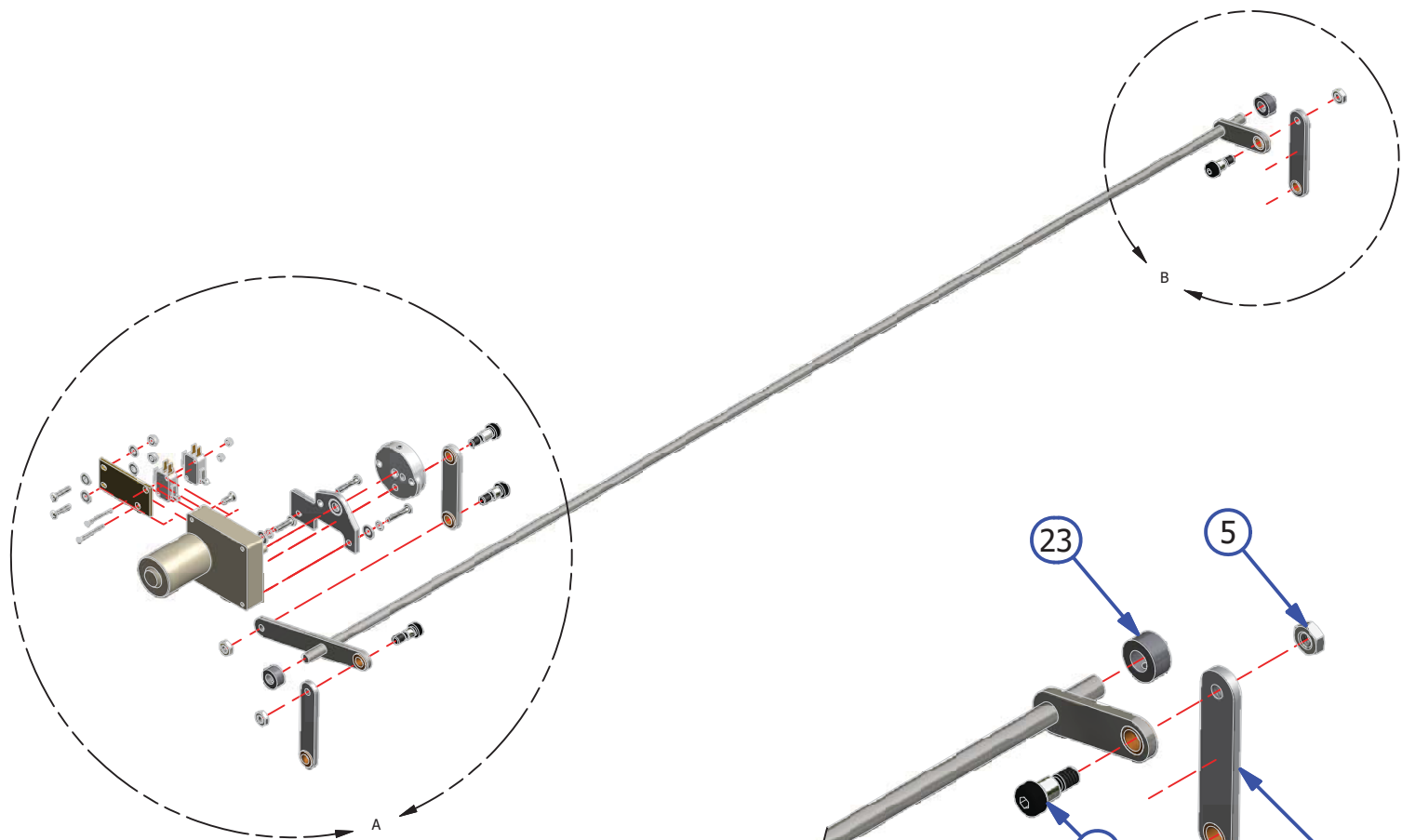


# BRUSH LIFT ROD ASSEMBLY

REV. 2/16

<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	1	158-8634	SQUEEGEE/BRUSH MOUNT PLATE ASSEMBLY	EA
	1	158-9614	BALL BEARING MINITURE	EA
3	1	164-8218	FLEX BRUSH LIFT ROD - 2016	EA
4	2	164-6011	FLEX BRUSH LIFT ROD TO BEARING LINK	EA
5	3	153-2027A	JAM NUT - 5/16-18	EA
6	5	153-2801	SHOULDER BOLT-3/8 X 3/8 (5/16-18)	EA
7	6	153-9803	FLANGED BUSHING (3/8 X 1/2 X 1/4)	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		153-2817	FLAT HEAD PHILLIPS - 8-32 X 1/2	EA
22	1	153-2091	MS PHILLIPS - 10-32 X 3/4	EA
23	2	153-2804	COLLAR - 3/8 X 3/4 X 3/8	EA





# VACUUM MOTOR ASSEMBLY

REV. 1/16

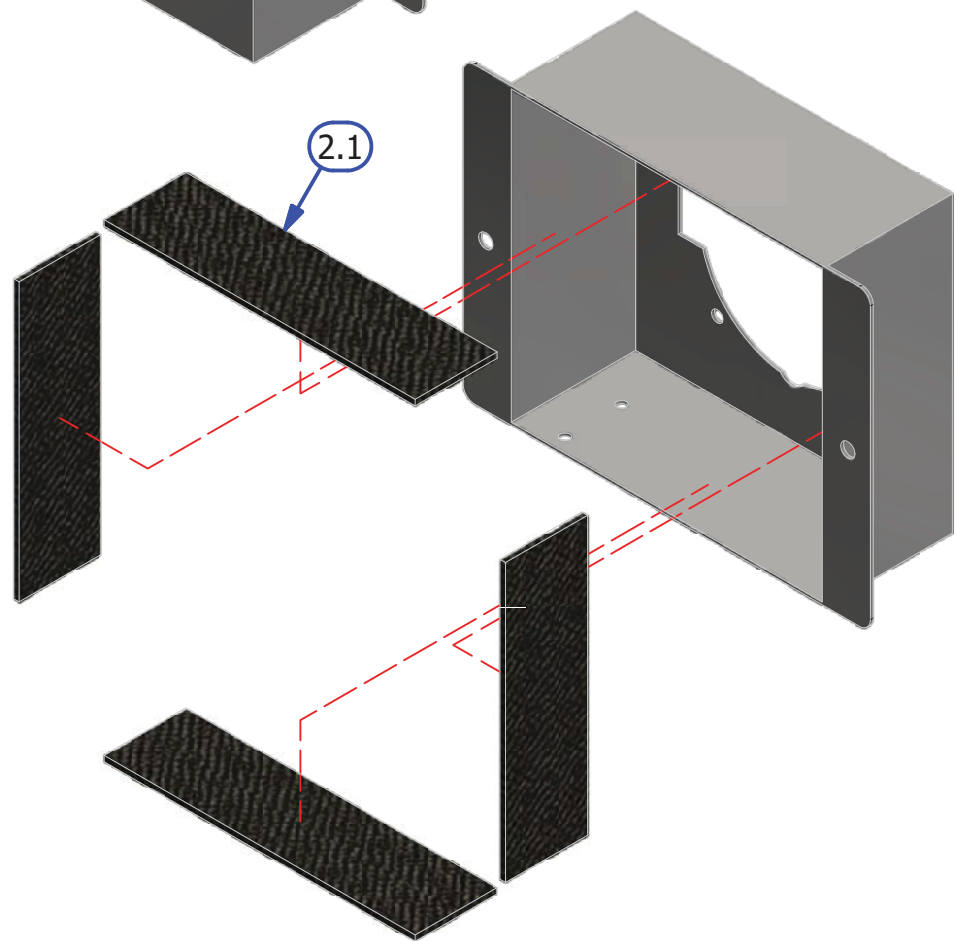
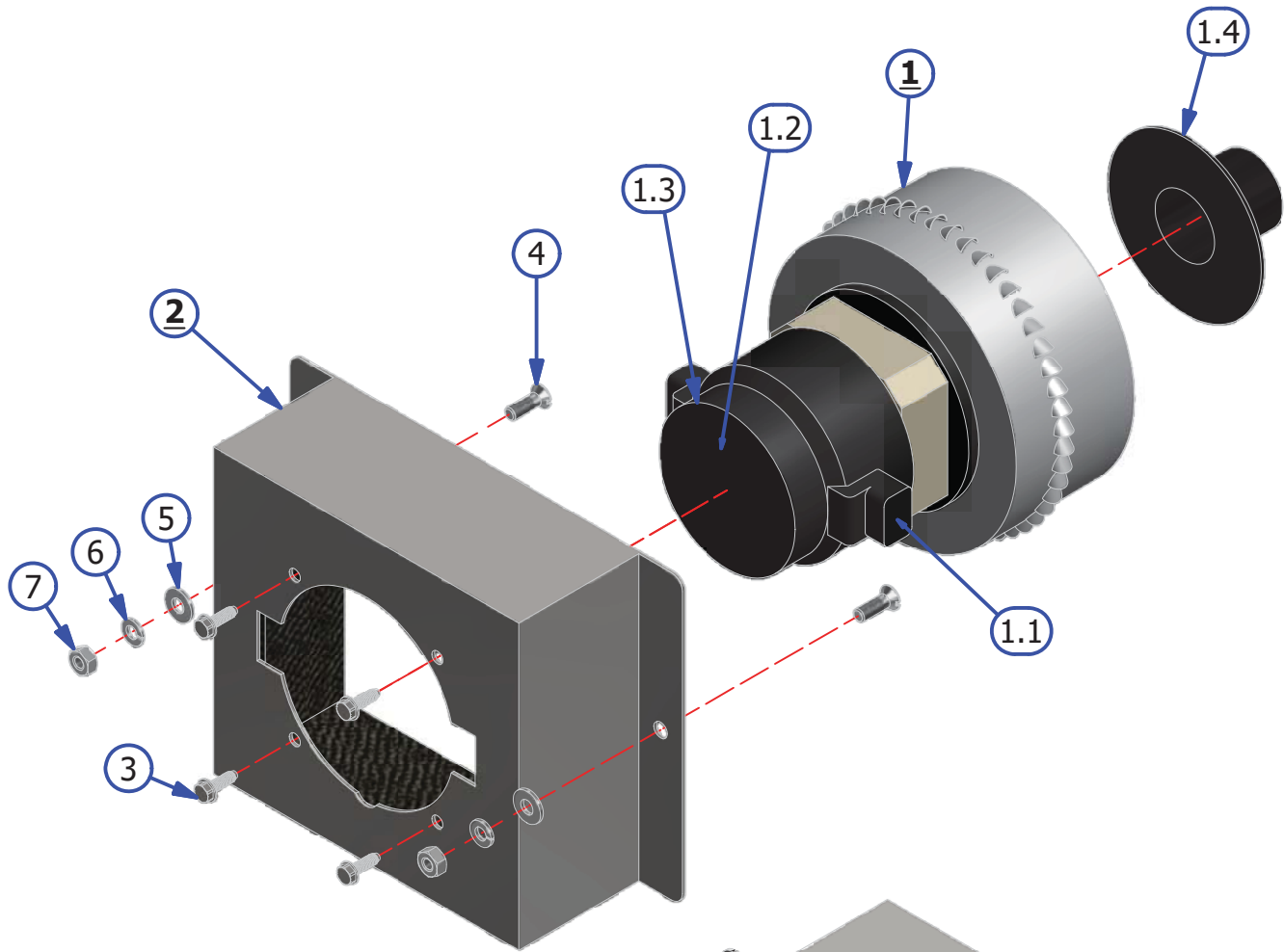
<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
<b>1</b>	<b>1</b>	<b>158-8407</b>	<b>VACUUM MOTOR ASSEMBLY (COMPLETE)</b>	
1.1	1	158-1421B	VACUUM MOTOR BRUSHES	PR
1.2	1	153-0204F	FAN BLADE	EA
1.3	1	153-0204H	FAN BLADE COVER	EA
1.4*	1	153-6221M	VACUUM WALL PLASTIC ADAPTER (See Below)	EA
<b>2</b>	<b>1</b>	<b>158-8618</b>	<b>VACUUM MOTOR HOUSING</b>	
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.



# CLEANER TANK ASSEMBLY

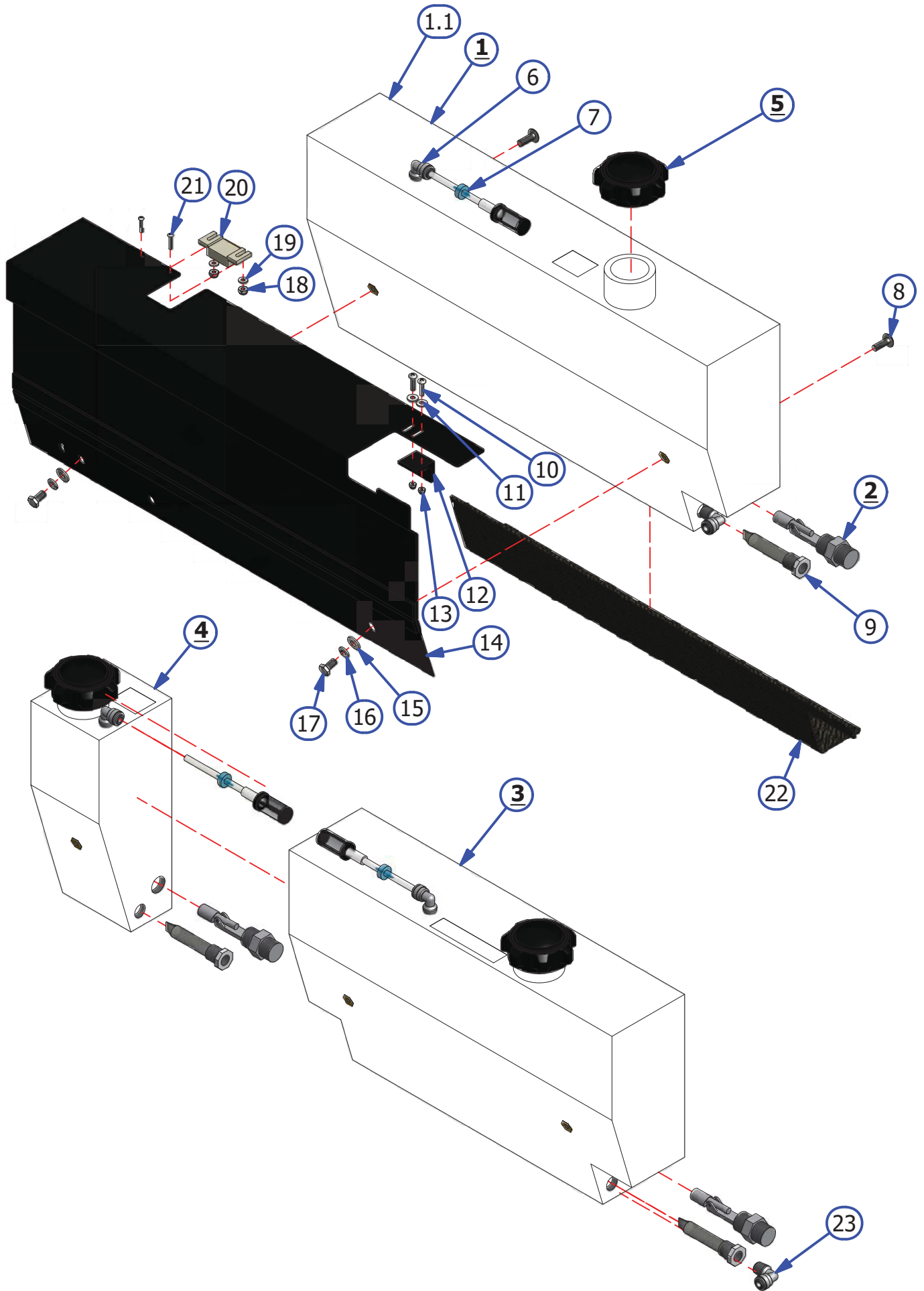
REV. 9/14

<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART 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		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	164-8212	FELT KIT - 24" X 1/8 48" X 9" X 1/8"	IN



## **TECHNICAL NOTE**

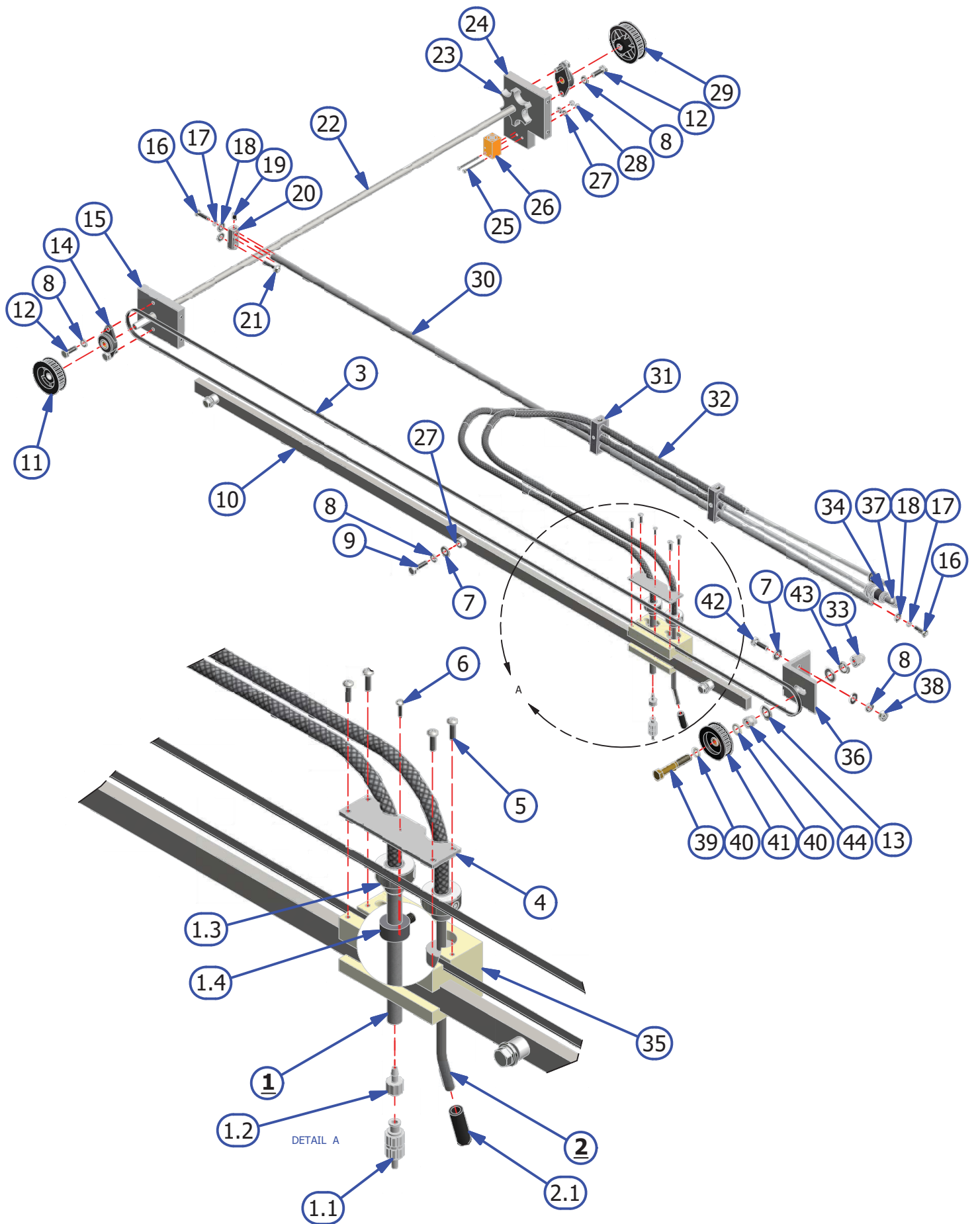
\*FOR MACHINES WITH THE UPGRADED CLEANING SYSTEM, THESE PARTS ARE QUANTITY OF TWO.



# CLEANER HEAD ASSEMBLY

REV. 3/16

<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 WITH 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	164-8228	PINDECK TREATMENT TIP ASSEMBLY	EA
2.1	1	164-2067	PINDECK TREATMENT TIP COVER	EA
3	1	154-9201	HEAD DRIVE BELT ASSEMBLY	EA
4	1	164-6230	CLEANER HEAD BELT MOUNT	EA
5	4	153-2081	MS PHILLIPS - 6-32 X 1/2	EA
6	1	153-2504	MS PHILLIPS - 4-40 X 3/8	EA
7	1	153-2004	FLAT WASHER	EA
8	1	153-2014	LOCKWASHER - 1/4	EA
9	1	153-2053	HHCS - 1/4 X 1"	EA
10	1	154-6877	CLEANER HEAD GUIDE BAR	EA
11	1	154-9205B	PULLEY (28XL 3/8 BORE)	EA
12	1	153-2603	HHCS 1/4-20 X 3/4	EA
13	1	153-2006	FLAT WASHER 3/8	EA
14	2	154-9804	FLANGED BEARING FOR CLEANER DRIVE SHAFT	EA
15	1	154-6878	CLEANER HEAD DRIVE SHAFT BLOCK	EA
16	4	153-2091	MS PHILLIPS - 10-32 X 3/4	EA
17	4	153-2013	LOCK WASHER #10	EA
18		153-2003	FLAT WASHER #10	EA
19	2	153-2051A	SET SCREW - 1/4-20 X 1/4	IN
20	1	164-6090	CLEANER HOSE SHAFT MOUNT	EA
21	2	153-2092	MS PHILLIPS - 10-32 X 1	EA
22	1	164-6047	FLEX CLEANER HEAD DRIVE SHAFT	EA
23	1	154-6884	6 TOOTH SENSOR DISK	EA
24	2	164-6064	CLEANER HEAD IDLER MOUNT BLOCK	EA
25	2	153-2516	MS PHILLIPS - 4-40 X 1-1/2	EA
26	1	154-1220	PROXIMITY SENSOR	EA
27	2	153-2001	FLAT WASHER #6	EA
28	2	153-2231	LOCKNUT - 4-40	EA
29	1	154-9805	PULLEY - 32XL037 - 3/8 BORE DF DBL SET	EA
30	1	154-6889	CLEANER HOSE ROUTING BAR	EA
31	2	164-6231	HOSE SPRING MOUNT BLOCK	EA
32	2	154-0867	CLEANER HOSE SPRING	EA
33	1	153-2030	ACORN NUT 3/8 - 16	EA
34	1	154-0222	BULK HEAD UNION	EA
35	1	164-6224	CLEANER HEAD ASSEMBLY	EA
36	1	164-6048	CLEANER HEAD IDLER MOUNT	EA
37	1	154-0222	ELBOW - 1/4 IN STEM X 1/4 IN TUBING OD	EA
38	1	153-2023	HEX NUT - 1/4-20	EA
39	1	153-2815	HHCS - 3/8-16 X 2-1/4 (GRADE 8)	EA
40	1	153-2009	NYLON FLAT WASHER	EA
41	1	154-9806	PULLEY - (28XL037 - 1/2 BORE NO SET	EA
42	1	153-2052	HHCS - 1/4-20 X 7/8"	EA
43	1	153-2016	LOCK WASHER 3/8"	EA
44	1	153-2025	HEX NUT - 3/8-16	EA

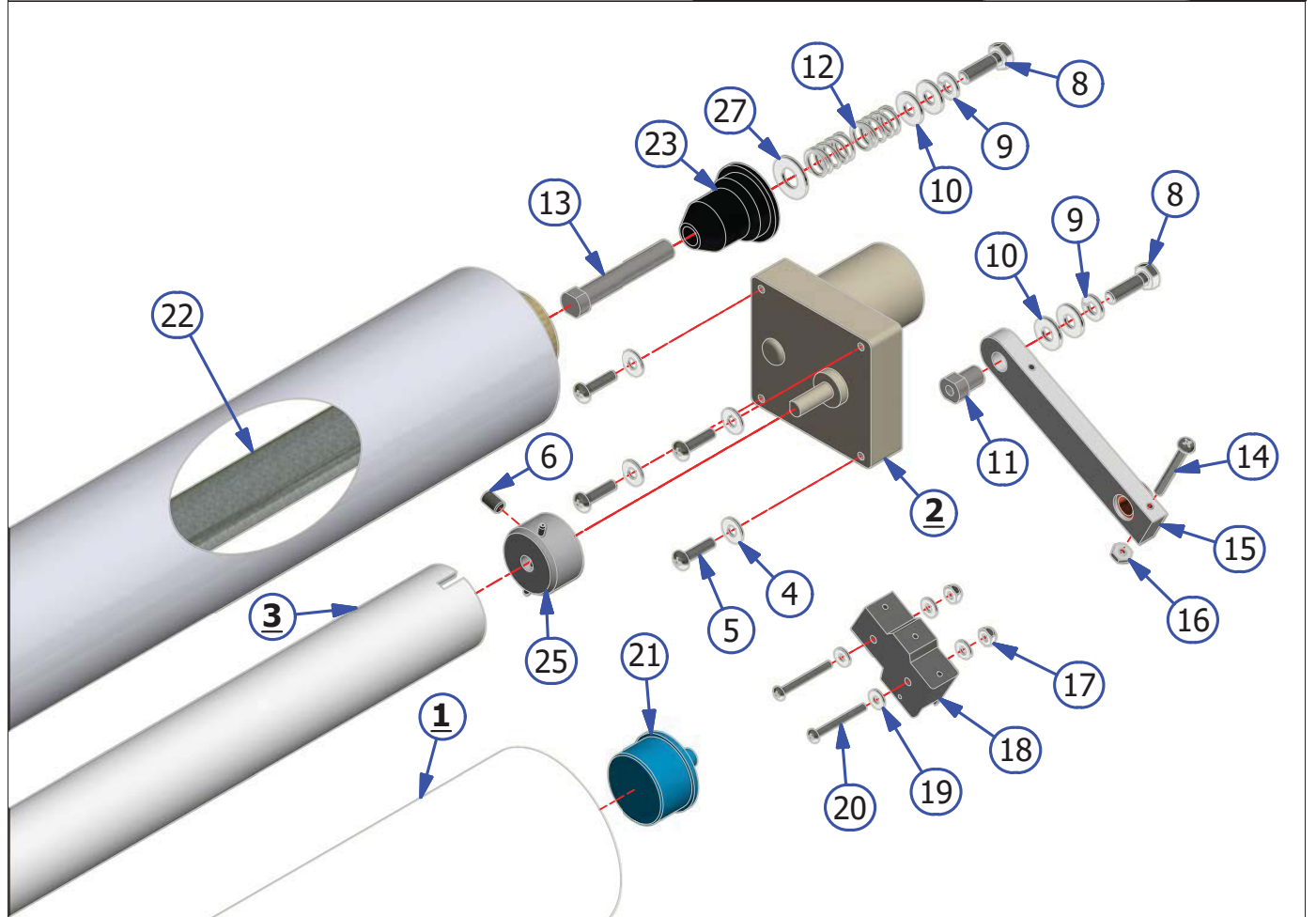
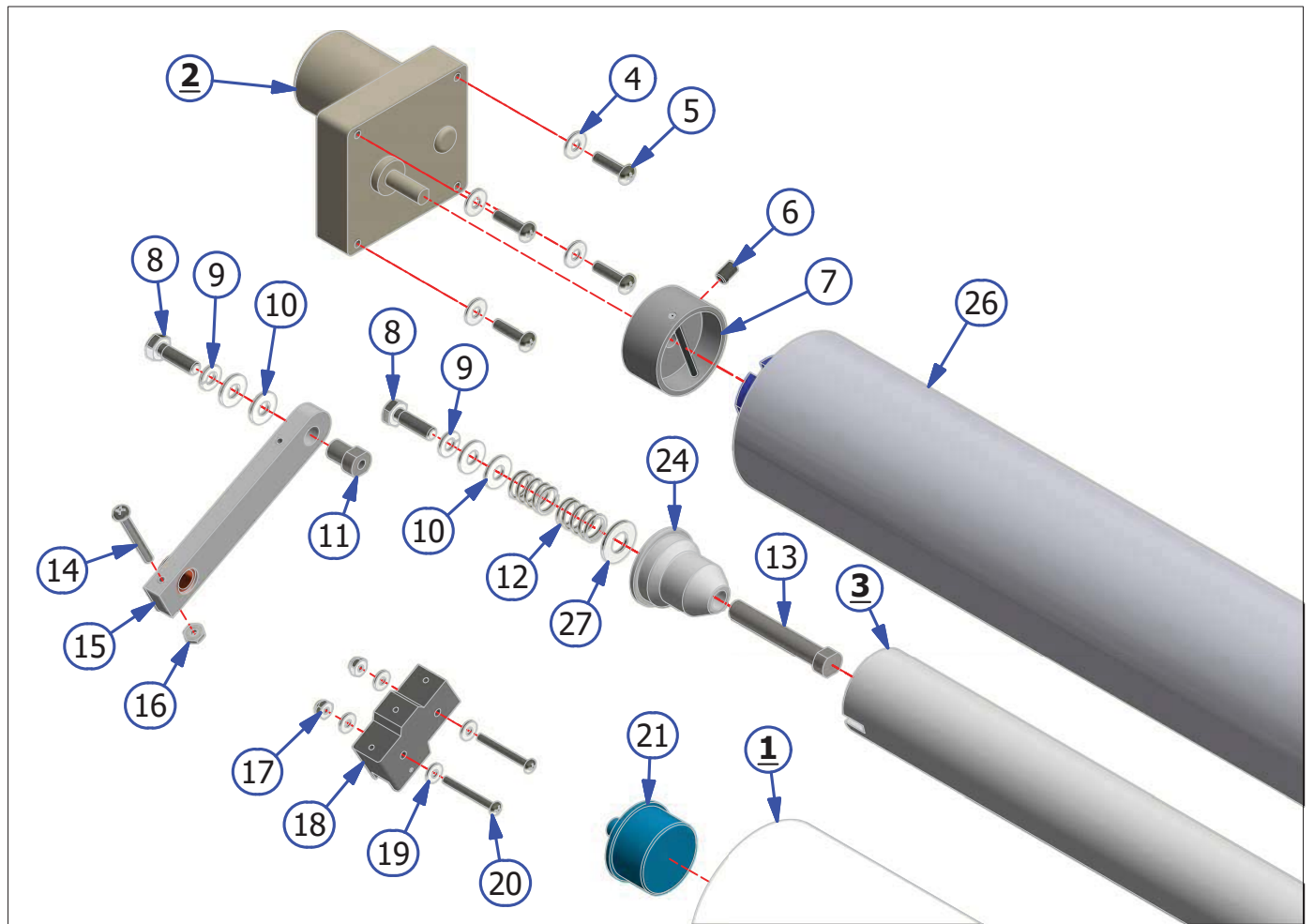


# DUSTER ASSEMBLY

REV. 9/17

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
<b>1</b>	<b>1</b>	<b>153-8839</b>	<b>CUSHION ROLLER WITH WRAP ASSEMBLY</b>	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
<b>2</b>	<b>2</b>	<b>158-8403</b>	<b>DUSTER MOTOR ASSEMBLY</b>	EA
<b>3</b>	<b>1</b>	<b>153-8824</b>	<b>PVC TAKE UP REEL</b>	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	4	153-2603	HHCS - 1/4-20 X 3/4	EA
9	2	153-2014	LOCK WASHER 1/4"	EA
10	8	153-2004	FLAT WASHER 1/4-20	EA
11	2	164-6175	CUSHION ROLLER STUD	EA
12	4	164-2081	DUSTER SPRING FOR STUD MOUNT	EA
13	2	164-6174	DUSTER PLUG STUD	EA
14	2	153-2090	MS - PHILLIPS - -32 X 1-1/2	EA
15	2	164-8826	CUSHION ROLLER ARM ASSY FOR STUD MOUNT	EA
16	2	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	8	153-2001	FLAT WASHER #6	EA
20	4	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	164-6108A	DUSTER PLUG CARDBOARD CORE (STUD MOUNT)	EA
24	1	164-6109A	DUSTER PLUG FOR PVC CORE (STUD MOUNT)	EA
25	1	153-8202B	DUSTER SOLID DRIVE HUB (PVC)	EA
26	1	153-0047EZ	K2 SELECT DUSTER CLOTH (BOX OF 4)	CASE
27	2	153-2006	FLATWASHER - 3/8"	EA

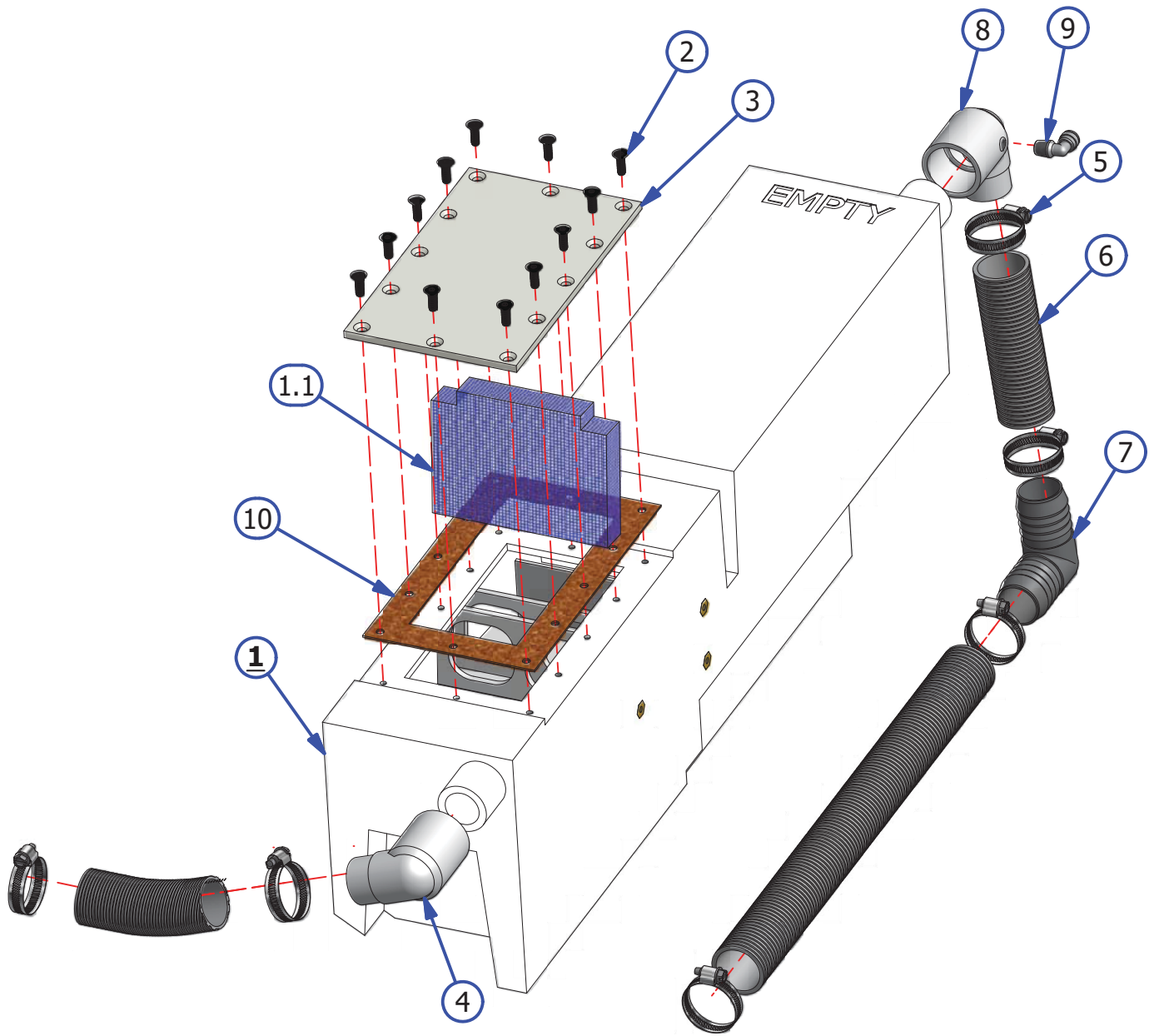




# RECOVERY TANK

REV. 2/16

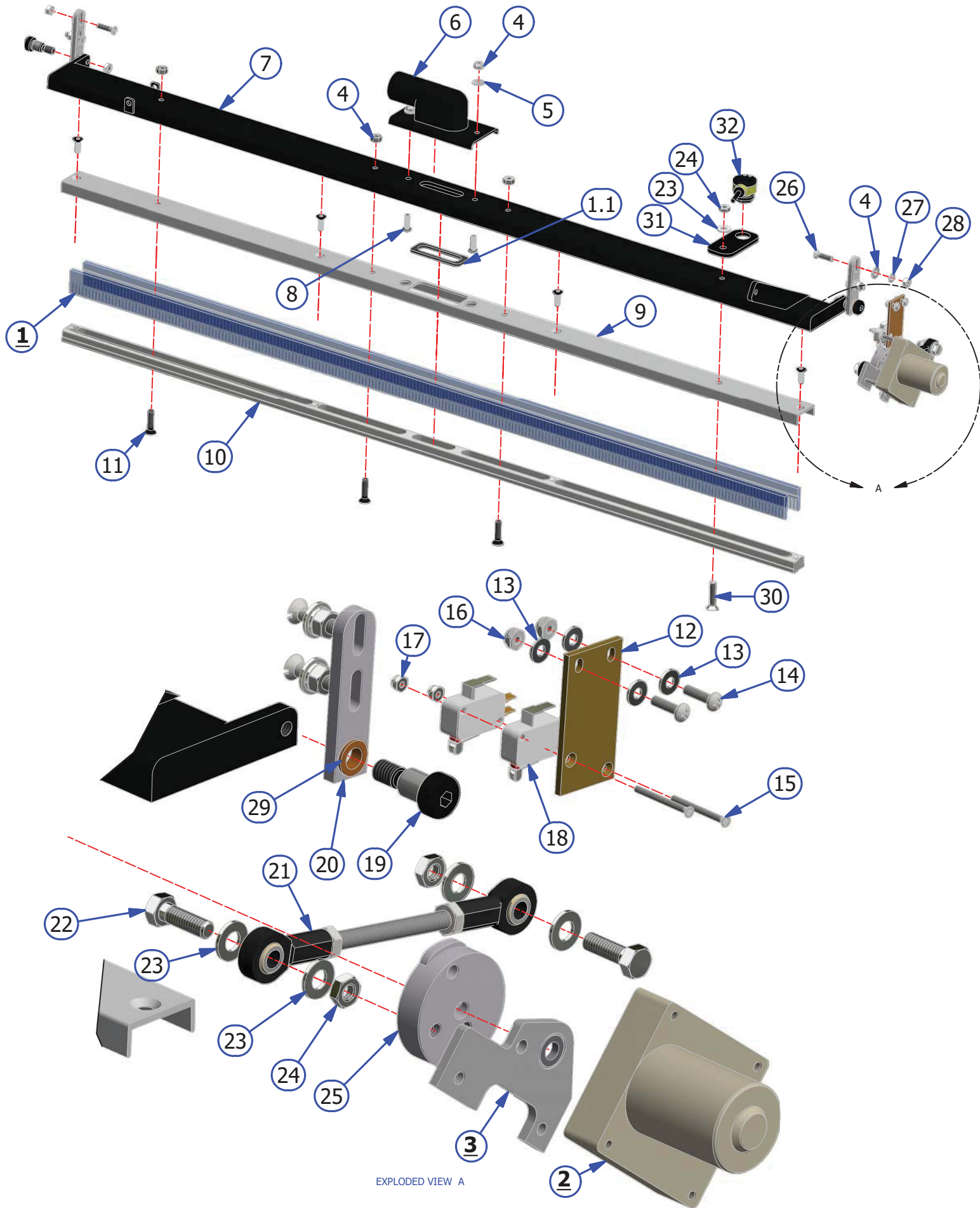
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8017	FLEX RECOVERY TANK	EA
1.1	1	164-8017F	RECOVERY TANK FILTER	EA
2	12	153-2968	SCREW - 1/4-20 X 3/4 FSHCS	EA
3	1	164-6120	FLEX RECOVERY TANK COVER PLATE	EA
4	1	153-8827T	1-1/4 PVC ELBOW-TANK INLET (NO THREADS)	EA
5	6	153-2406	HOSE CLAMP (2 INCH)	EA
6	1	154-0260	FLEXIBLE 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



# SQUEEGEE ASSEMBLY

REV. 9/17

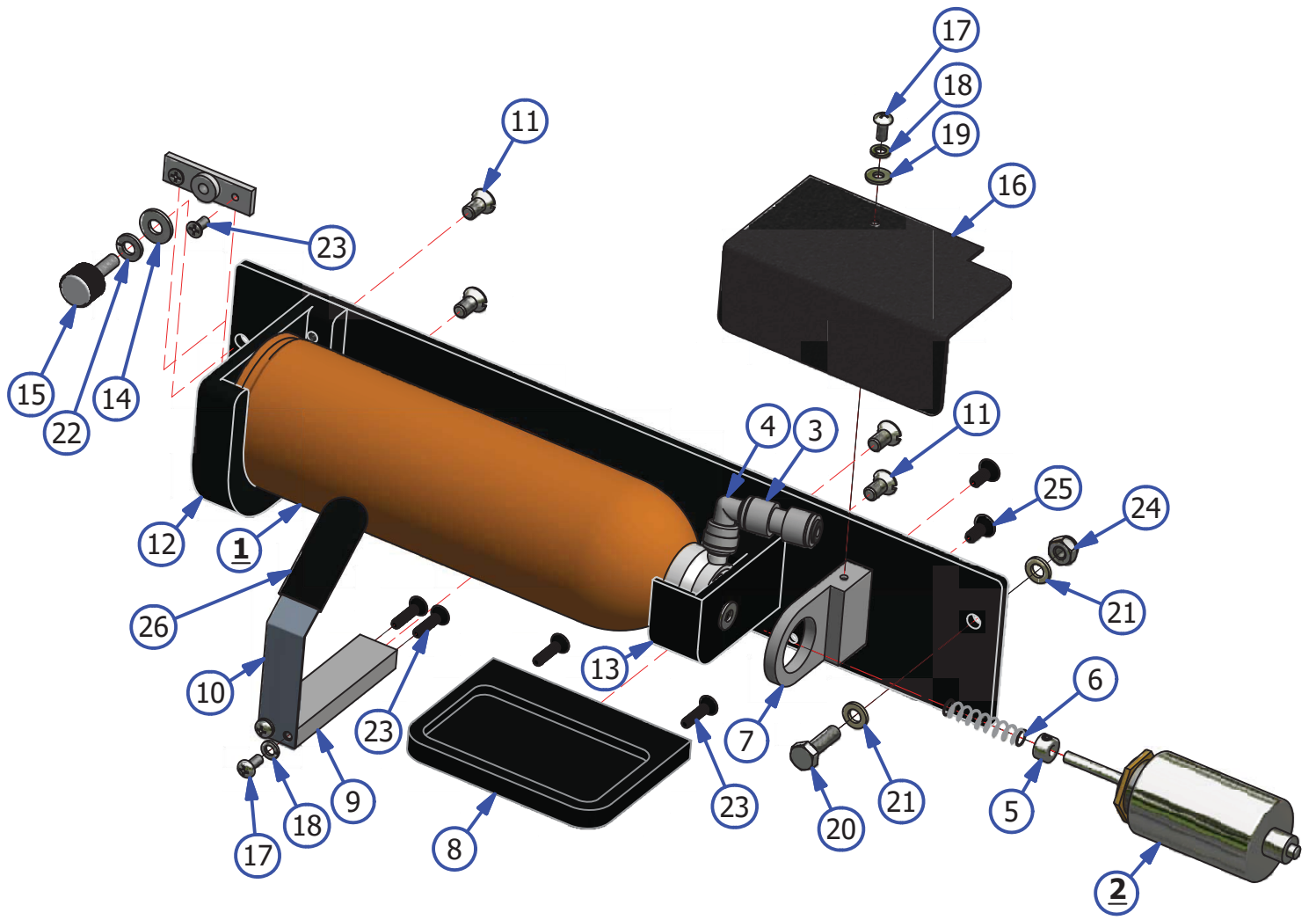
<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8038K	SQUEEGEE BLADE AND GASKET REPLACEMENT (1 SET)	EA
1.1	1	164-0003	GASKET	EA
2	1	158-8402	MOTOR ASSEMBLY -24VDC	EA
3	1	158-8634	SQUEEGEE/BRUSH MOUNT PLATE ASSEMBLY	EA
	1	158-9614	BALL BEARING MINITURE	EA
4	2	153-2020	LOCKNUT - 1/4-20 (NYLOK)	EA
5	6	153-2004	1/4 FLATWASHER	EA
6	1	154-6677A	SQUEEGEE HOSE ADAPTER NYLON	EA
7	1	154-6339	SQUEEGEE MOUNT ANGLE - BLACK (USE 154-6339-2850)	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	3	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		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	5	153-2005	5/16 FLATWASHER	EA
24	3	153-2027A	JAM NUT - 5/16-18	EA
25	1	154-6243	MOTOR CAM-DUAL LOBES (STACKED SWITCHES)	EA
26	4	153-2079	FHCS - 1/4 X 20 1 BLACK ALLOY	EA
27	4	153-2014	LOCK WASHER 1/4"	EA
28	4	153-2023	1/4-20 HEX NUT	EA
29	2	153-9803	BUSHING	EA
30	1	153-2513	FHSS - 5/16-18 X 1-1/2	EA
31	1	164-6176	FAILSAFE SENSOR MOUNT PLATE	EA
32	1	164-1241	FAILSAFE BEAM SENSOR	EA



# PINDECK TREATMENT ASSEMBLY

REV. 3/16

<u>INDEX</u> <u>NUMBER</u>	<u>QTY.</u>	<u>PART</u> <u>NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
<u>1</u>	1	156-8310	SPOT ON PINDECK TREATMENT (CASE OF 4)	EA
<u>2</u>	1	164-8226	PINDECK SPRAY SOLENOID	EA
3	1	154-0248	REDUCING UNION	EA
4	1	154-0222	ELBOW 1/4" STEM X 1/4" TUBING OD	EA
5	1	164-2065	SHAFT COLLAR 3/16"	EA
6	1	164-1227	SOLENOID SPRING ASSEMBLY	EA
7	1	164-6242	SOLENOID BRACKET ASSEMBLY	EA
8	1	164-6245	DRIP TRAY ASSEMBLY	EA
9	1	164-6241	CAN CLIP BRACKET	EA
10	1	164-6240	CAN CLIP	EA
11	4	153-2742	FHMS 1/4-20 X 1/2	EA
12	1	164-6238	CAN CRADLE BOTTOM	EA
13	1	164-6237	CAN CRADLE TOP	EA
14	1	153-2004	FLAT WASHER 1/4"	EA
15	1	164-2016	THUMB SCREW - KNURLED HEAD	EA
16	1	164-6246	SOLENOID COVER	EA
17	3	153-2086A	MS PHILLIPS 8-32 X 3/8	EA
18	3	153-2013	LOCK WASHER #10	EA
19	1	153-2002	FLAT WASHER #10	EA
20	1	153-2052	HHCS 1/4-20 X 1"	EA
21	1	153-2510	NYLON WASHER 1/4"	EA
22	1	153-2014	LOCK WASHER 1/4"	EA
23		153-2542	FHSS ALLEN 8-32 X 3/4	EA
24	1	153-2020	LOCKNUT (NYLOCK 1/4")	EA
25	1	153-2998	FHCS SCREW 10-24 X 1/2" BLACK OXID	EA
26	1	164-2053	RECTANGLE CAP	EA

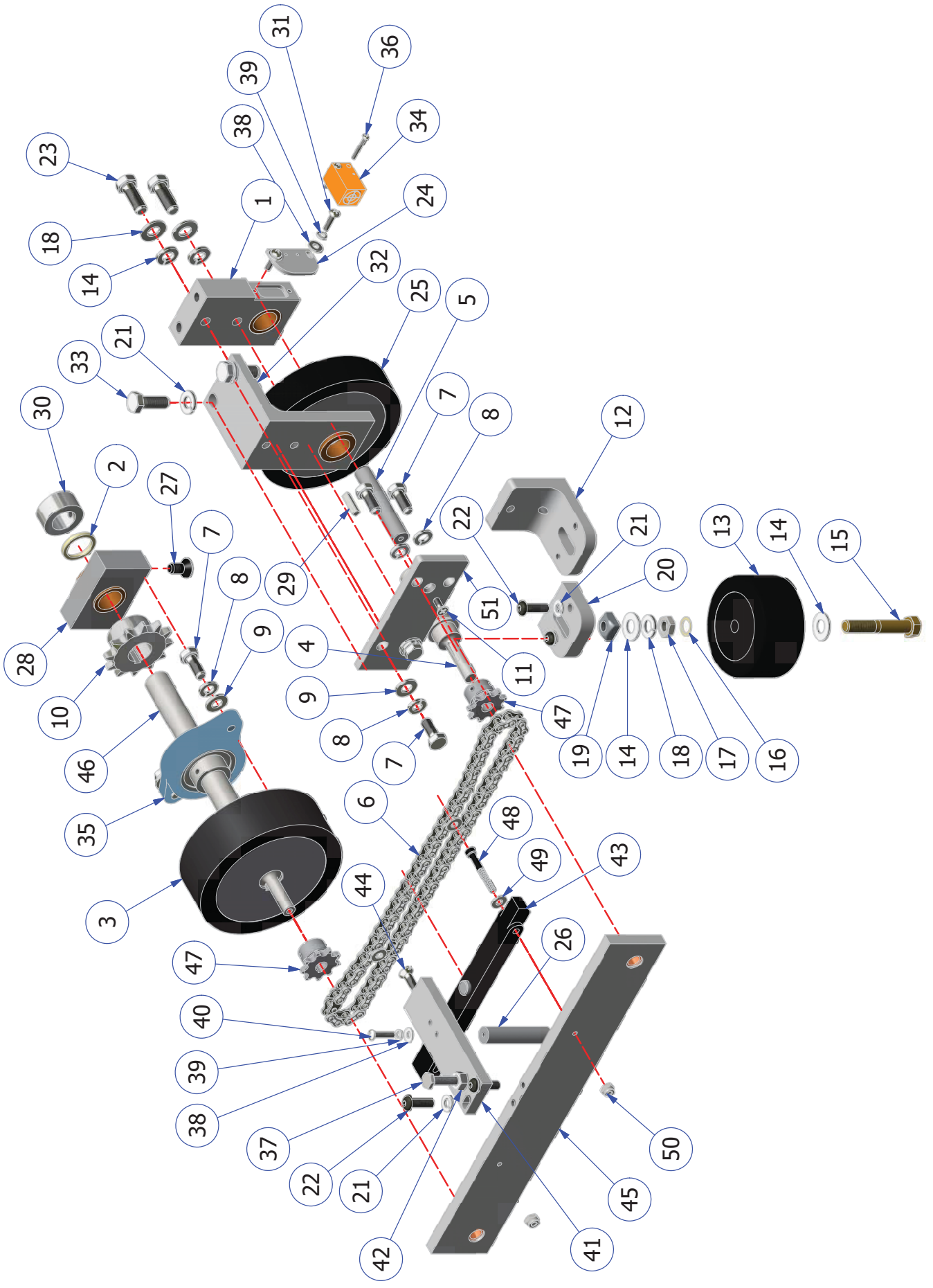


# ZTR ASSEMBLY - LEFT

REV. 3/16

<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	3	153-2939	NYLON WASHER 3/4" X 1/16"	EA
3	2	158-7001	DRIVE WHEEL 4.5 IN	EA
4	1	164-6030	FLEX KICK-UP WHEEL SHAFT	EA
5	1	158-6705	BUMPER WHEEL SIDE POST	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	158-9602	SPROCKET 40BAH 3/4 BORE WITH KEYWAY AND SET	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	2	153-2066	HHCS - 3/8-16 X 1	EA
24	1	164-6222	ZTR PROXIMITY SENSOR MOUNT	EA
25		164-7002A	1" WIDE KICK UP WHEEL ASSEMBLY	EA
26	1	164-6162	GUARD STAND OFF	EA
27	2	153-2802A	FHSS - 5/16 X 5/8	EA
28	1	158-8601	ZTR SHAFT BUSHING BLOCK ASSEMBLY	EA
29	1	153-2100	KEYSTOCK - 3/16 X 3/4	EA
30	1	153-2937	SHAFT COLLAR 3/4" ID	EA
31	2	153-2086	MS PHILLIPS - 8-32 X 5/8	EA
32	1	164-8220	KICK UP WHEEL ANGLE ASSEMBLY	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	153-2528	HHCS - 1/4"-20 X 1-3/4"	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
42	1	153-2304	JAM NUT	EA
43	1	164-6031	ZTR CHAIN TENSIONER	EA
44	1	153-2078	FHMS - 1/4-20 X 3/4"	EA
45	1	164-6040	FLEX ZTR SHAFT SUPPORT	EA
46	1	164-6028	FLEX ZTR DRIVE SHAFT - LEFT	EA
47	2	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	2	153-2208	LOCKNUT - 10-24 (NYLOK)	EA
51	1	164-6221	BUMPER WHEEL PLATE	EA

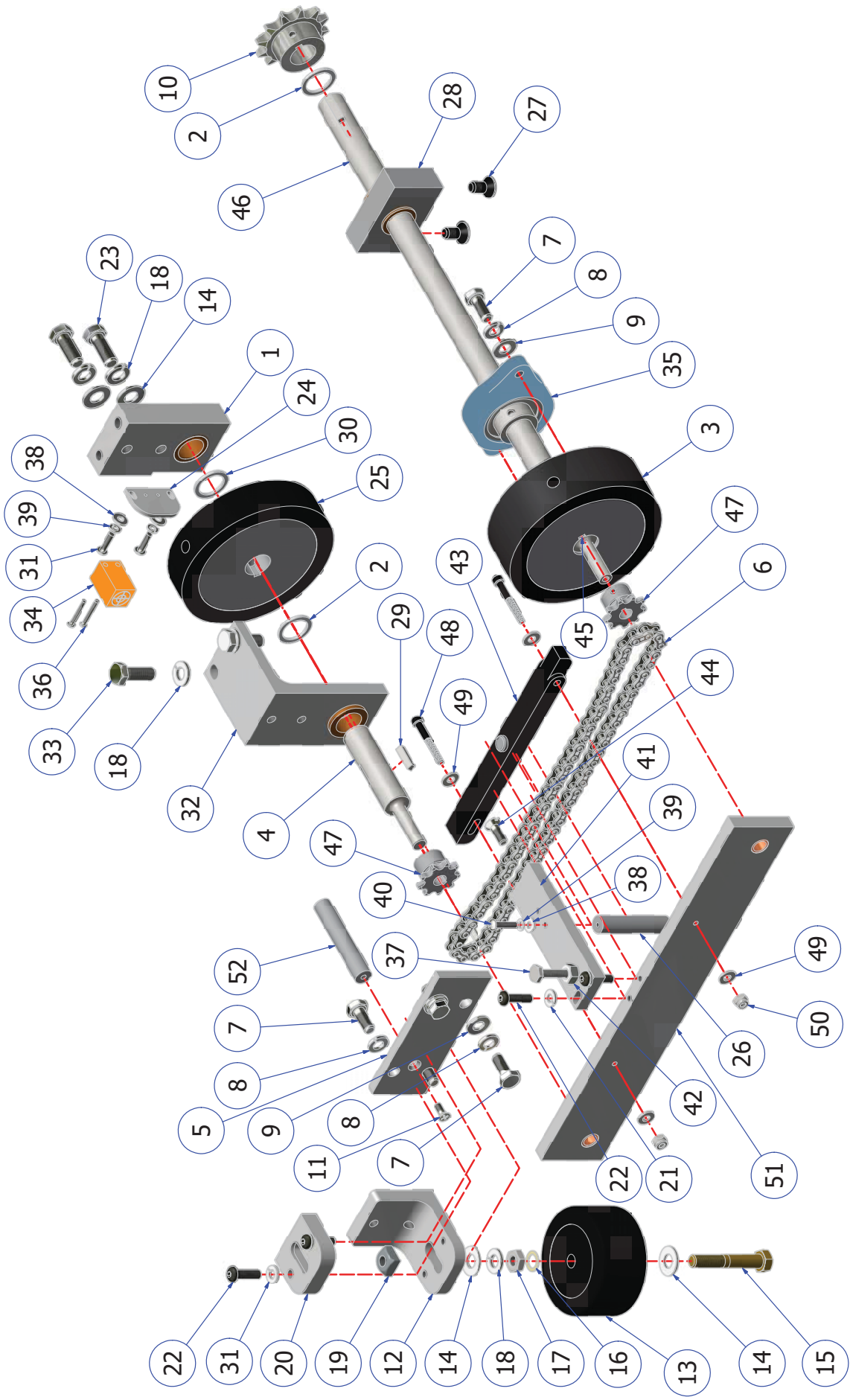




# ZTR ASSEMBLY - RIGHT

REV. 3/16

<u>INDEX NUMBER</u>	<u>QTY.</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>UOM</u>
1	1	164-8219	KICK UP WHEEL MOUNTING BLOCK	EA
2	2	153-2939	NYLON WASHER 3/4" X 1/16"	EA
3	1	158-7001	DRIVE WHEEL 4.5 IN	EA
4	1	164-6030	FLEX KICK-UP WHEEL SHAFT	EA
5	1	164-6221	BUMPER WHEEL PLATE	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	158-9602	SPROCKET 40BAH 3/4 BORE WITH KEYWAY AND SET	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	2	153-2066	HHCS - 3/8-16 X 1	EA
24	1	164-6222	ZTR PROXIMITY SENSOR MOUNT	EA
25		164-7002A	1" WIDE KICK UP WHEEL ASSEMBLY	EA
26	1	164-6162	GUARD STAND OFF	EA
27	2	153-2802	FHSS - 5/16 X 5/8	EA
28	1	158-8601	ZTR SHAFT BUSHING BLOCK ASSEMBLY	EA
29	1	153-2100	KEYSTOCK - 3/16 X 3/4	EA
30	1	158-9601	BUSHING FLANGED - 3/4 ID X 7/8 OD	EA
31	2	153-2086	MS PHILLIPS - 8-32 X 5/8	EA
32	1	164-8220	KICK UP WHEEL ANGLE ASSEMBLY	EA
33	4	153-2066	HHCS - 3/8-16 x 1	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	153-2528	HHCS - 1/4"-20 X 1-3/4"	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
42	1	153-2304	JAM NUT	EA
43	1	164-6031	ZTR CHAIN TENSIONER	EA
44	1	153-2078	FHMS - 1/4-20 X 1" SELF LOCKING	EA
45	1	153-2102	KEYSTOCK - 3/16 X 1-1/4"	EA
46	1	164-6029	FLEX ZTR DRIVE SHAFT - RIGHT	EA
47	2	164-9003	SPROCKET - 40B10 (5/8")	EA
48	2	164-2004	SHCS - 10-24 X 1-1/2	EA
49	4	153-2035	BLIND RIVET WASHER - 3/16	EA
50	2	153-2208	LOCKNUT - 10-24 (NYLON)	EA
51	1	164-6040	FLEX ZTR SHAFT SUPPORT	EA
52	1	158-6705	BUMPER WHEEL SIDE POST	EA





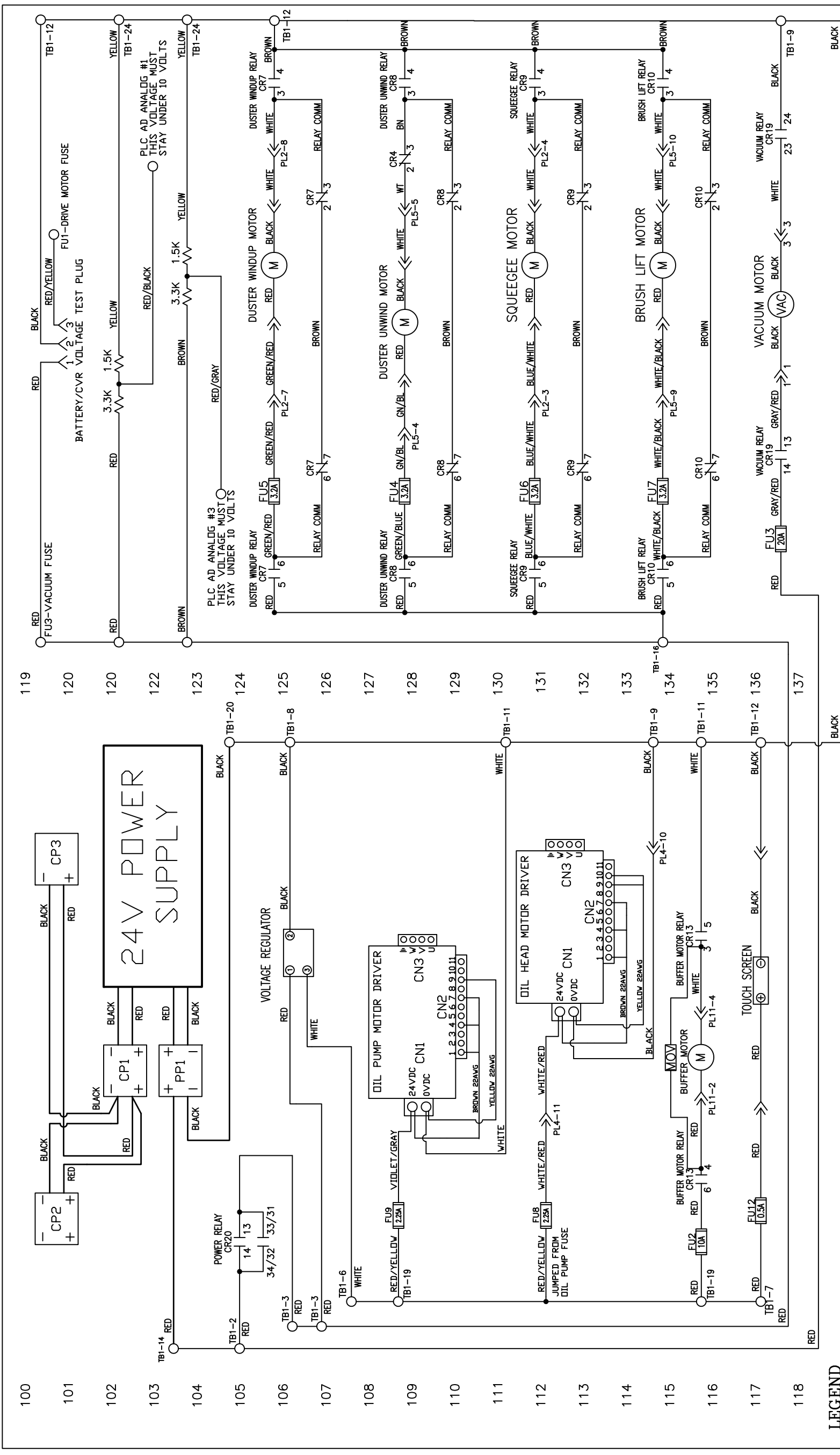
# CHAPTER 9

## FLEX ELECTRICAL DRAWINGS

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](mailto:tech@kegel.net).

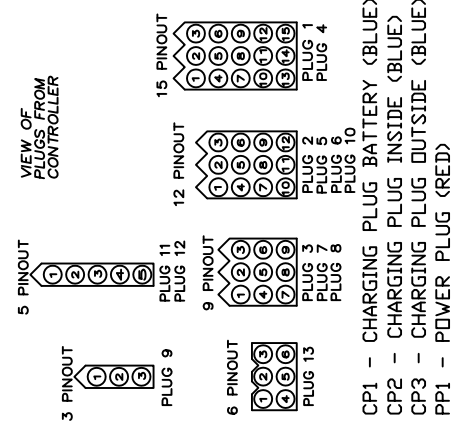
Flex Motor Wiring Layout	230
Flex Output Wiring Layout	231
Flex Input Wiring Layout	232
Flex Speed Control Wiring Layout	233
Flex Analog Wiring Layout	234
Flex Terminal Block Wiring Layout	235
Flex Power Wiring Layout	236
Flex Voltage Regulator Wiring Layout	237
Flex Oil Pump Driver & Motor Wiring Layout	238
Flex Oil-Cleaner Head Driver & Motor Wiring Layout	239
Flex L-R & R-L Head Proximity Sensor Wiring Layout	240
Flex Oil Valves Wiring Layout	241
Flex Buffer Motor Wiring Layout	242
Flex Variable Buffer Wiring Layout	243
Flex Brush Lift Motor Wiring Layout	244
Flex Vacuum Wiring Layout	245
Flex Squeegee Motor & Switch Wiring Layout	246
Flex Duster Unwind Motor & Switch Wiring Layout	247
Flex Duster Windup Motor & Switch Wiring Layout	248
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Flex Cleaner Pump #2 Wiring Layout	250
Flex Start Button & Duster Presoak Button Wiring Layout	251
Flex Oil Float & Cleaner Float Wiring Layout	252
Flex Speed Tach & LDS Wiring Layout	253
Flex LED Tank Light Wiring Layout	254
Flex Trigger Solenoid Wiring Layout	255

### Flex Motor Wiring Layout



**LEGEND**

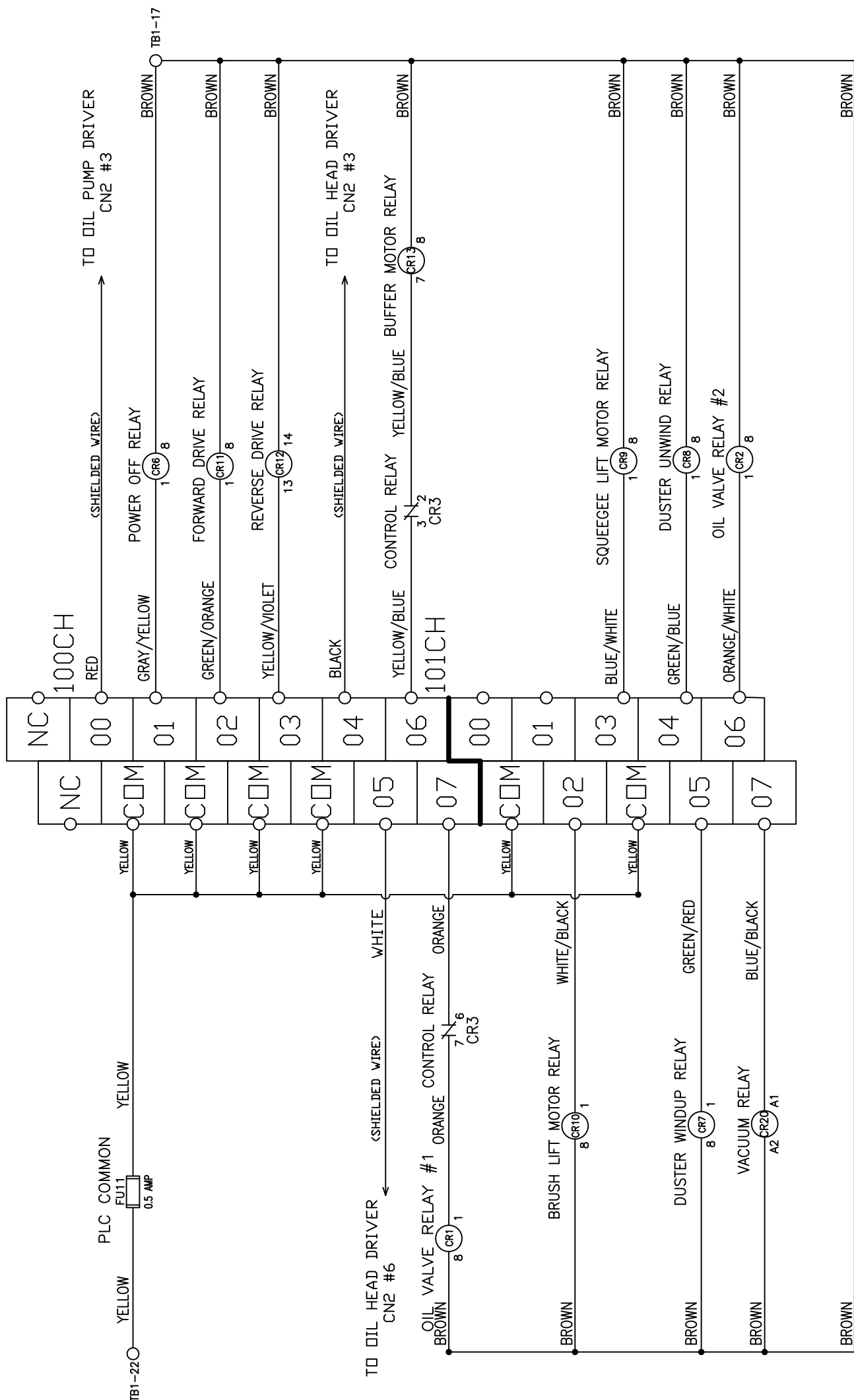
- CR1 - OIL VALVE RELAY TANK A
  - CR2 - OIL VALVE RELAY TANK B
  - CR3 - CONTROL RELAY
  - CR4 - DUSTER POLARITY SWITCH RELAY
  - CR5 - PIN DECK TREATMENT RELAY
  - CR6 - POWER OFF RELAY
  - CR7 - DUSTER WINDUP MOTOR RELAY
  - CR8 - DUSTER UNWIND MOTOR RELAY
  - CR9 - SQUEEGEE LIFT MOTOR RELAY
  - CR10 - BRUSH LIFT MOTOR RELAY
  - CR11 - FORWARD DRIVE MOTOR RELAY
  - CR12 - REVERSE DRIVE MOTOR RELAY
  - CR13 - BUFFER MOTOR RELAY
  - CR14 -
  - CR15 -
  - CR16 -
  - CR17 -
  - CR18 -
  - CR19 - VACUUM MOTOR RELAY
  - CR20 - 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
  - FU17 - TRIGGER SOLENOID 3.2A
- PL1 - 10-PIN SIDE PLUG (15)
  - PL2 - 10-PIN SIDE PLUG (12)
  - PL3 - 10-PIN SIDE PLUG (9)
  - PL4 - 7-PIN SIDE PLUG (15)
  - PL5 - 7-PIN SIDE PLUG (12)
  - 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)
  - TB5 - TERMINAL BLOCK 5 (TOP PLC PLATE)



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		<b>SCALE</b>	N/A
		<b>SHEET</b>	1 OF 26

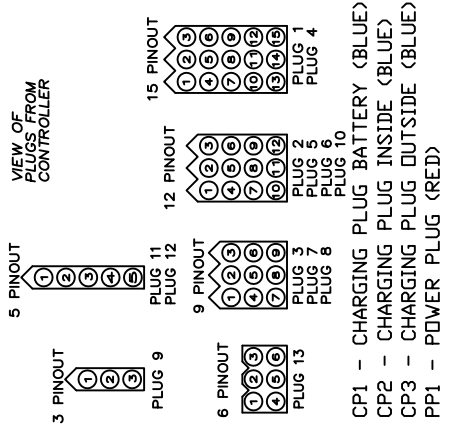
1961 LONGLEAF BLVD.  
LAKE WALES, FL 33859  
(866) 784-0200

DMRON  
SYSMAC  
CPIH  
OUTPUTS



LEGEND

- CR1 - OIL VALVE RELAY TANK A
  - CR2 - OIL VALVE RELAY TANK B
  - CR3 - CONTROL RELAY
  - CR4 - DUSTER POLARITY SWITCH RELAY
  - CR5 - PIN DECK TREATMENT RELAY
  - CR6 - POWER OFF RELAY
  - CR7 - DUSTER WINDUP MOTOR RELAY
  - CR8 - DUSTER UNWIND MOTOR RELAY
  - CR9 - SQUEEGEE LIFT MOTOR RELAY
  - CR10 - BRUSH LIFT MOTOR RELAY
  - CR11 - FORWARD DRIVE MOTOR RELAY
  - CR12 - REVERSE DRIVE MOTOR RELAY
  - CR13 - BUFFER MOTOR RELAY
  - CR14 -
  - CR15 -
  - CR16 -
  - CR17 -
  - CR18 - VACUUM MOTOR RELAY
  - CR19 - VACUUM MOTOR RELAY
  - CR20 - 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
  - FU17 - TRIGGER SOLENOID 3.2A
- PL1 - 10-PIN SIDE PLUG (15)
  - PL2 - 10-PIN SIDE PLUG (12)
  - PL3 - 10-PIN SIDE PLUG (9)
  - PL4 - 7-PIN SIDE PLUG (15)
  - PL5 - 7-PIN SIDE PLUG (12)
  - 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)

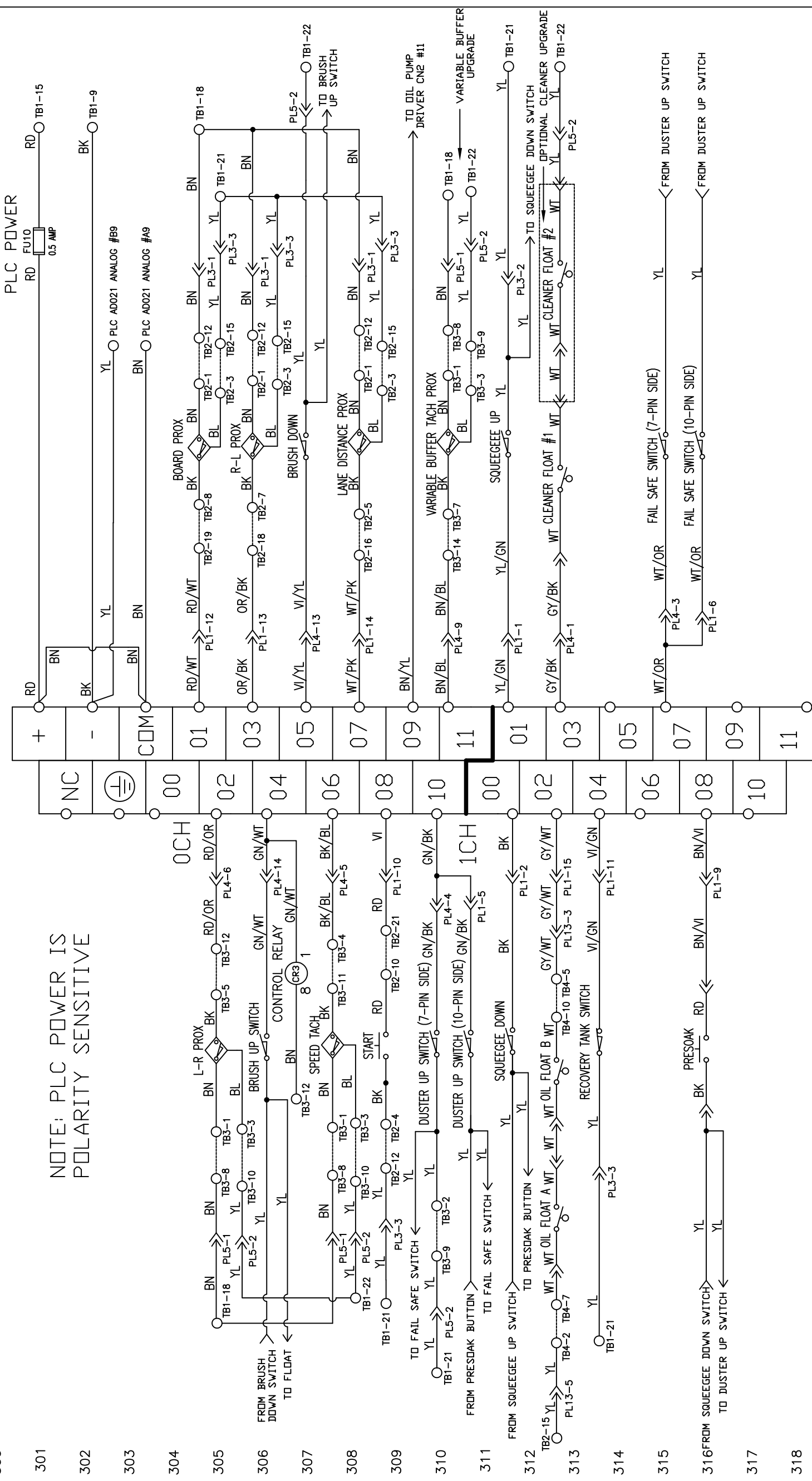


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DOC REV		SHEET	2 OF 26

1951 LONGLEAF BLVD.  
LAKE WALES, FL 33869  
(888) 794-0200

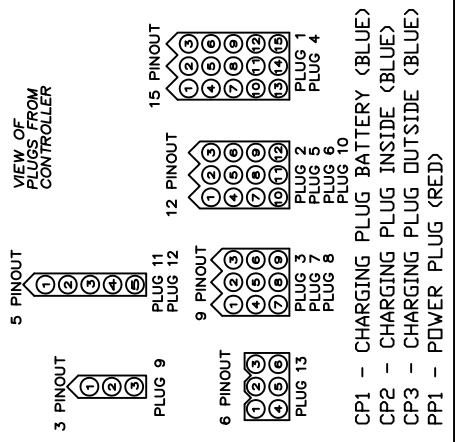
OMRON SYSMAC CP1H INPUTS

NOTE: PLC POWER IS  
POLARITY SENSITIVE



LEGEND

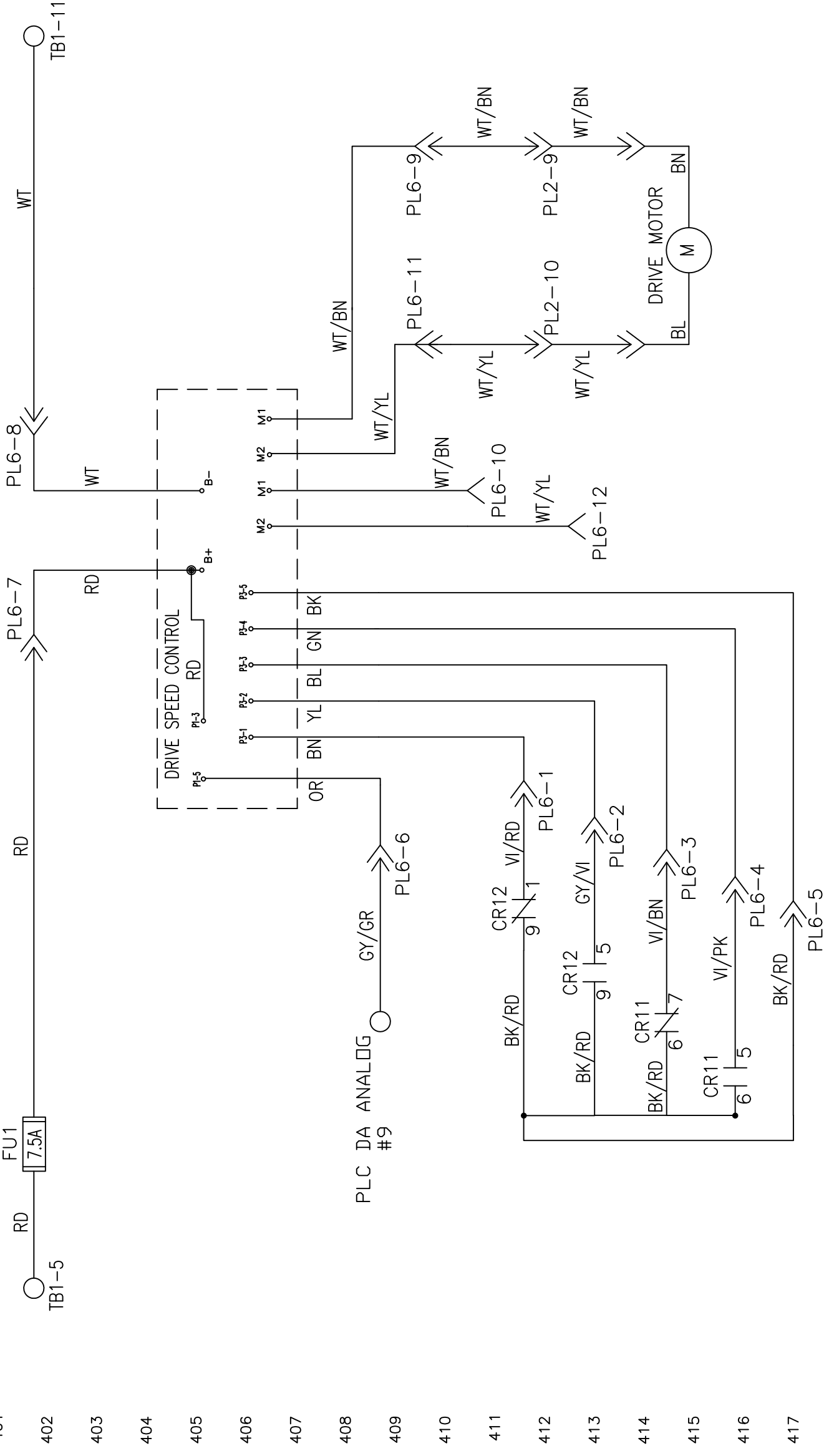
- CR1 - OIL VALVE RELAY TANK A
- CR2 - OIL VALVE RELAY TANK B
- CR3 - CONTROL RELAY
- CR4 - DUSTER POLARITY SWITCH RELAY
- CR5 - PIN DECK TREATMENT RELAY
- CR6 - POWER OFF RELAY
- CR7 - DUSTER WINDUP MOTOR RELAY
- CR8 - DUSTER UNWIND MOTOR RELAY
- CR9 - SQUEEGEE LIFT MOTOR RELAY
- CR10 - BRUSH LIFT MOTOR RELAY
- CR11 - FORWARD DRIVE MOTOR RELAY
- CR12 - REVERSE DRIVE MOTOR RELAY
- CR13 - BUFFER MOTOR RELAY
- CR14 -
- CR15 -
- CR16 -
- CR17 -
- CR18 - VACUUM MOTOR RELAY
- CR20 - 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
- FU17 - TRIGGER SOLENOID 3.2A
- PL1 - 10-PIN SIDE PLUG (15)
- PL2 - 10-PIN SIDE PLUG (12)
- PL3 - 10-PIN SIDE PLUG (9)
- PL4 - 7-PIN SIDE PLUG (15)
- PL5 - 7-PIN SIDE PLUG (12)
- 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)



MATERIAL		N/A	
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DOC REV			



KEGEL P/N  
154-1270

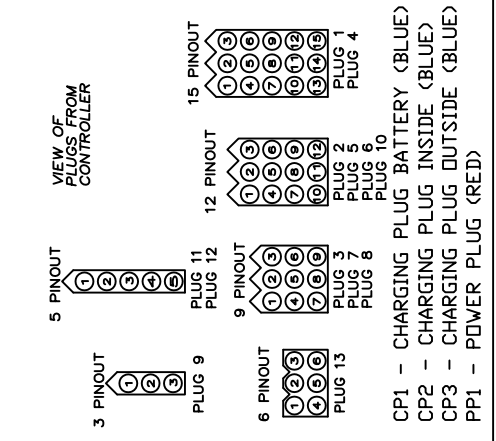


**LEGEND**

- CR1 - OIL VALVE RELAY TANK A
- CR2 - OIL VALVE RELAY TANK B
- CR3 - CONTROL RELAY
- CR4 - DUSTER POLARITY SWITCH RELAY
- CR5 - PIN DECK TREATMENT RELAY
- CR6 - POWER OFF RELAY
- CR7 - DUSTER WINDUP MOTOR RELAY
- CR8 - DUSTER UNWIND MOTOR RELAY
- CR9 - SQUEEGEE LIFT MOTOR RELAY
- CR10 - BRUSH LIFT MOTOR RELAY
- CR11 - FORWARD DRIVE MOTOR RELAY
- CR12 - REVERSE DRIVE MOTOR RELAY
- CR13 - BUFFER MOTOR RELAY
- CR14 -
- CR15 -
- CR16 -
- CR17 -
- CR18 - VACUUM MOTOR RELAY
- CR20 - 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
- FU17 - TRIGGER SOLENOID 3.2A

- PL1 - 10-PIN SIDE PLUG (15)
- PL2 - 10-PIN SIDE PLUG (12)
- PL3 - 10-PIN SIDE PLUG (9)
- PL4 - 7-PIN SIDE PLUG (15)
- PL5 - 7-PIN SIDE PLUG (12)
- 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)



MATERIAL		N/A	
DATE	07/21/15	DO NOT SCALE DRAWING	
DRAWN BY	SLS	REV DATE	
APPROVED:	MP	SIZE	C N/A
DOC REV		SCALE	N/A
		SHEET	4 OF 26

KEGEL		1961 LONGLEAF BLVD. LAKE WALES, FL 33869 (863) 734-0200	
DESCRIPTION		SPEED CONTROL SCHEMATIC	

400

401

402

403

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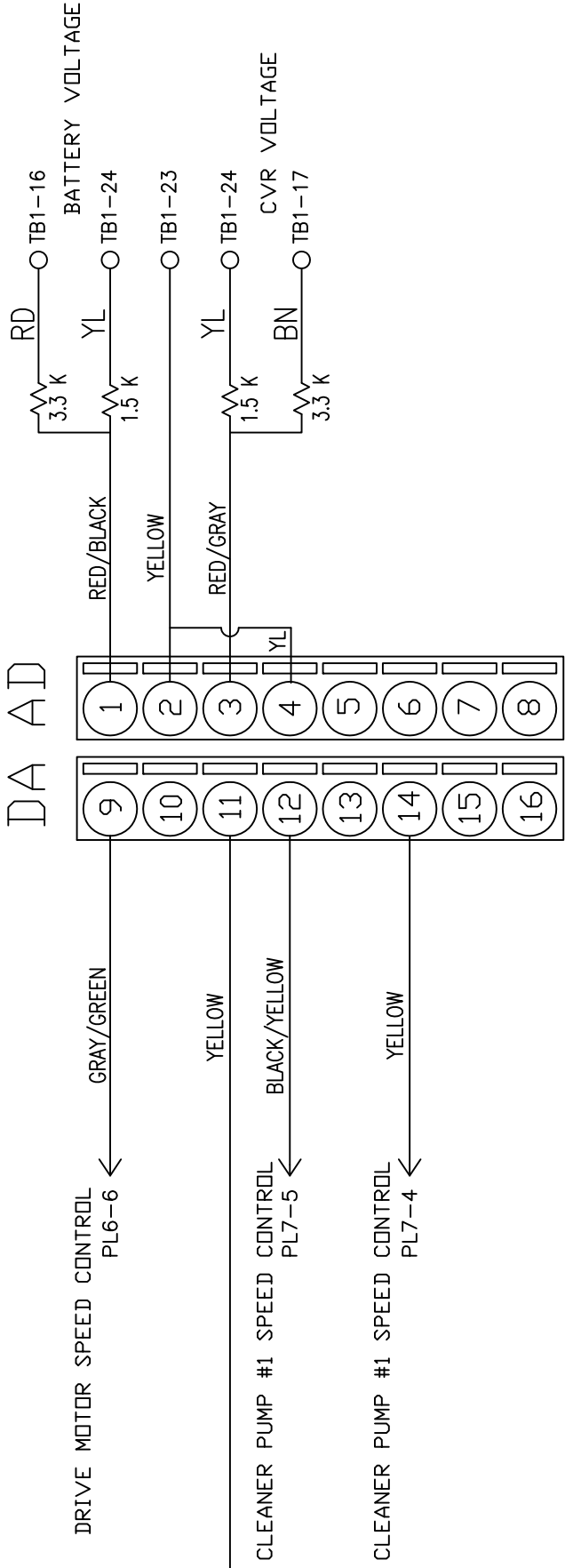
415

416

417

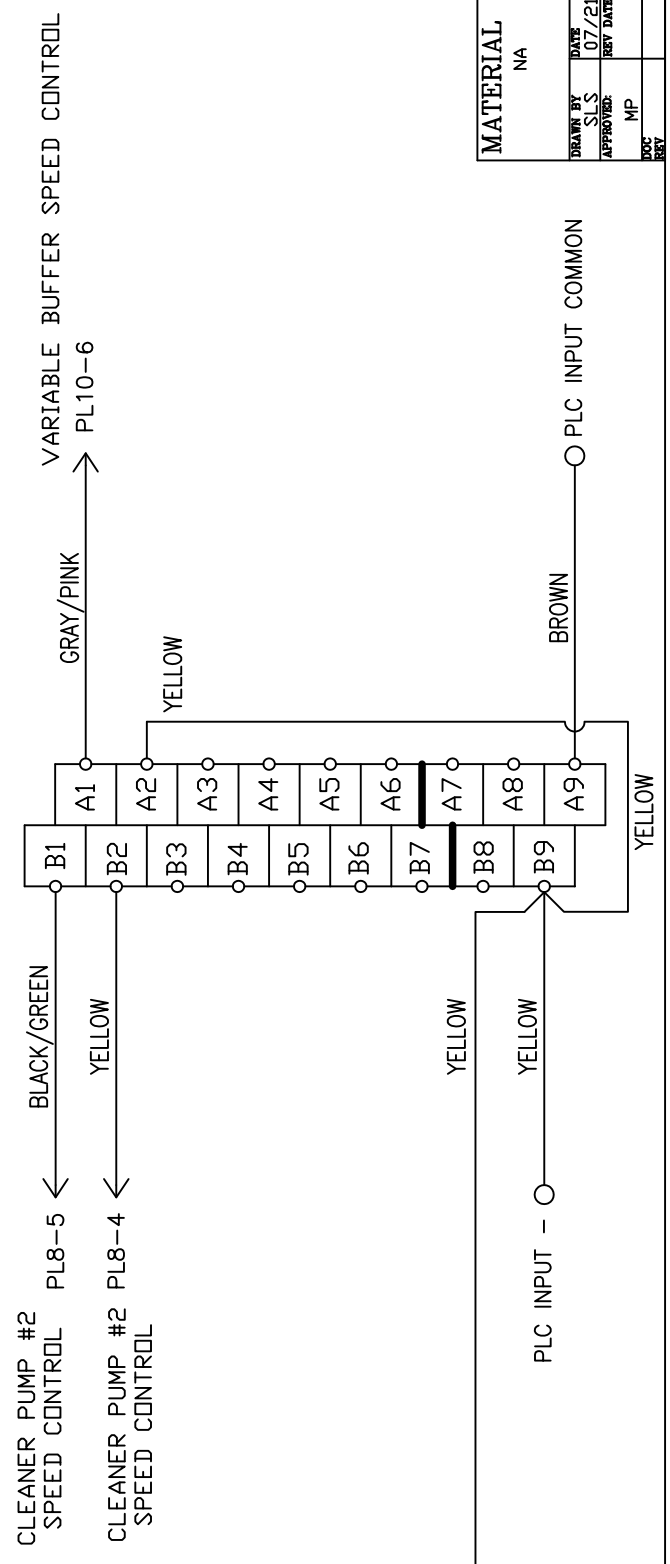
418

# BUILT IN PLC ANALOG



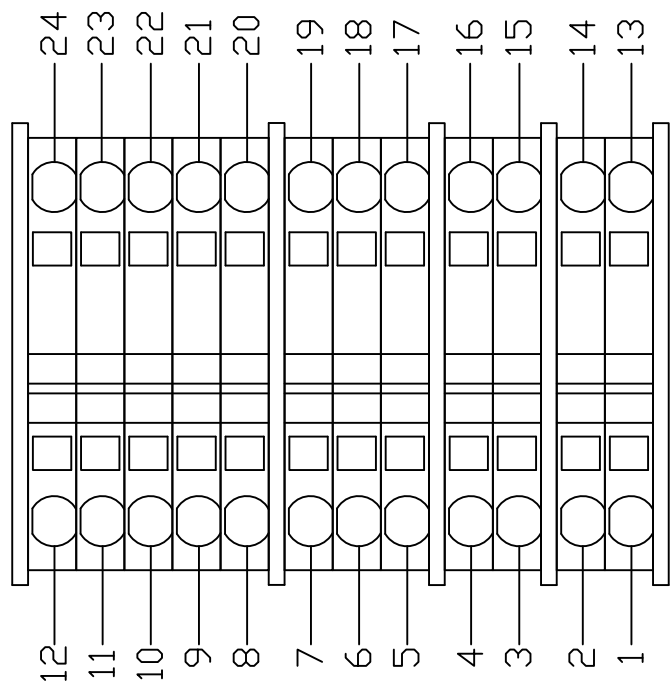
YELLOW

# AD021 ANALOG ADD ON UNIT



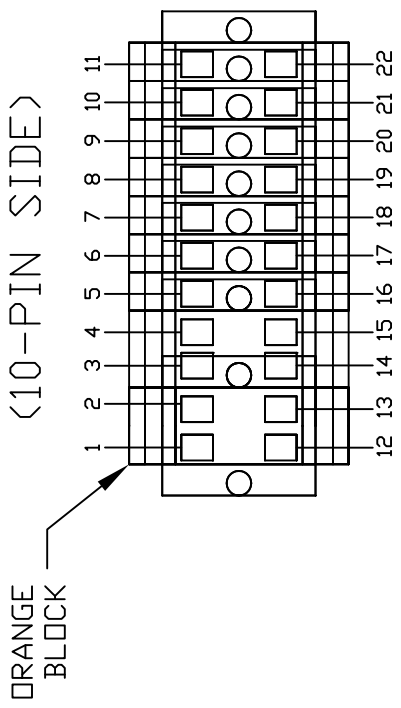
MATERIAL NA		KEGEL		1961 LONGLEAF BLVD. LAKE WALKER, FL 33669 (863) 734-0200	
DRAWN BY SLS		DATE 07/21/15		DESCRIPTION ANALOG WIRING SCHEMATIC	
APPROVED: MP		REV DATE		DO NOT SCALE DRAWING	
EPC REV		SCALE N/A		SIZE C	
		SHEET 5		FLEX 2016	
				DF 26	

# TB1 <MAIN>



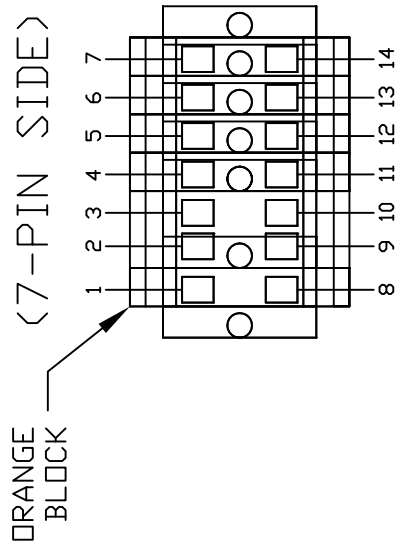
# TB2

<10-PIN SIDE>



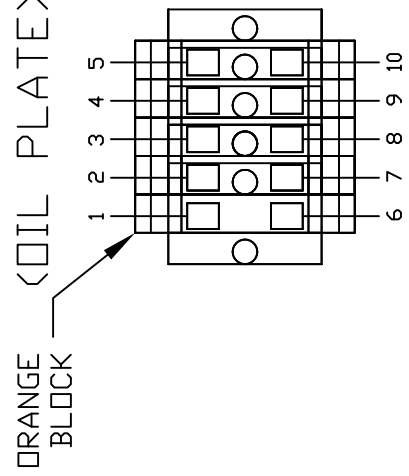
# TB3

<7-PIN SIDE>



# TB4

<OIL PLATE>



## LEGEND

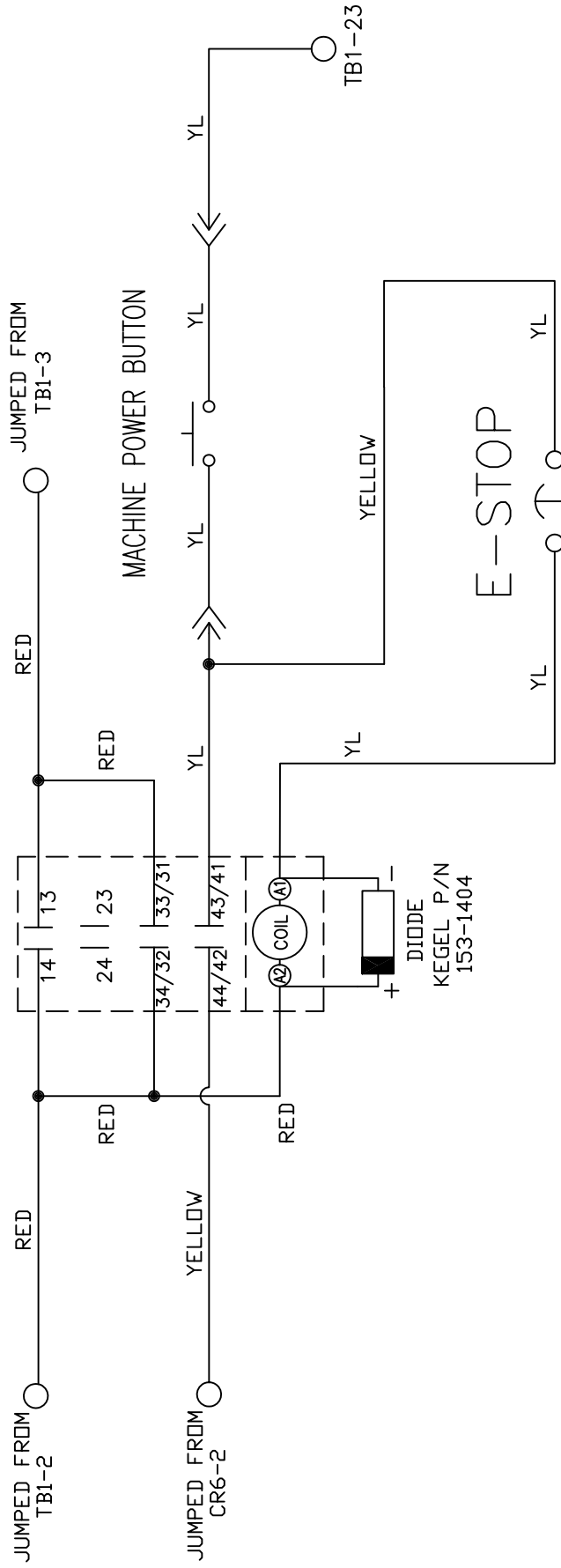
- TB1 - TERMINAL BLOCK 1 <MAIN>
- TB2 - TERMINAL BLOCK 2 <10-PIN SIDE>
- TB3 - TERMINAL BLOCK 3 <7-PIN SIDE>
- TB4 - TERMINAL BLOCK 4 <OIL PLATE>

MATERIAL NA		KEGEL 1961 LONGLEAF BLVD. LAKE WALKER, FL 33669 (863) 734-0200	
DRAWN BY SLS		DESCRIPTION TERMINAL BLOCK LAYOUT	
DATE 07/21/15	DO NOT SCALE DRAWING	SIZE C	REV MP
APPROVED:	DO NOT SCALE DRAWING	SCALE N/A	REV FLEX
DATE	DO NOT SCALE DRAWING	SCALE	REV
07/21/15	2016	6	26

4 3 2 1

D C B A

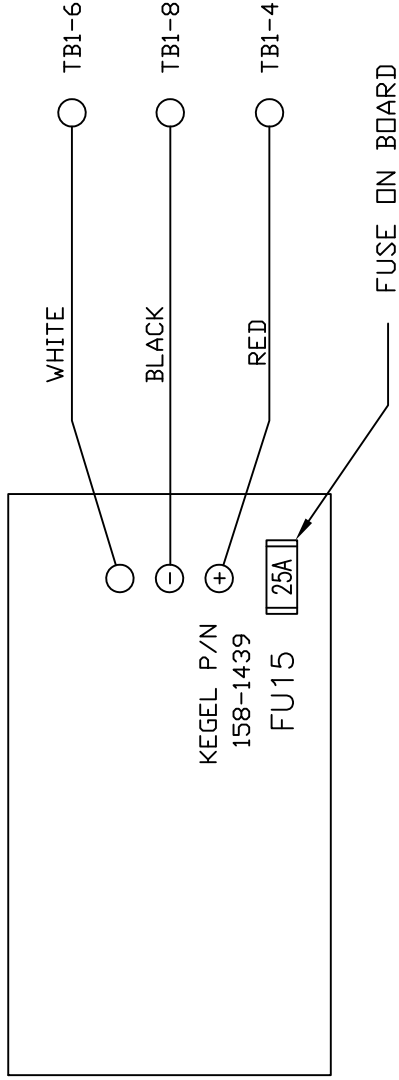
### POWER RELAY CR20



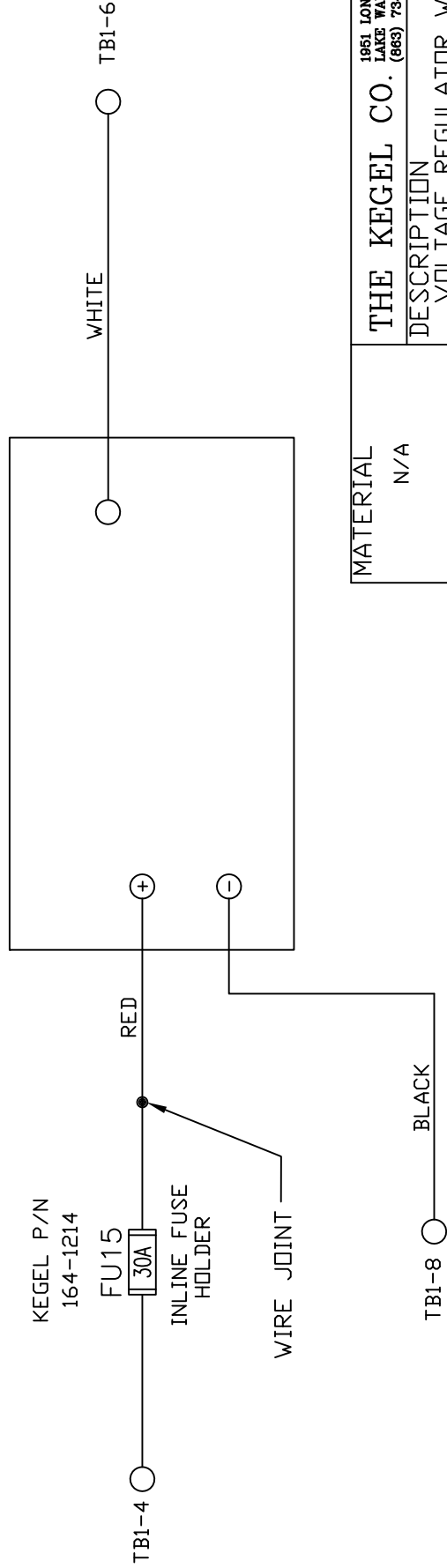
MATERIAL N/A		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 734-0200	
DRAWN BY SLS	DATE 07/21/15	DESCRIPTION POWER RELAY WIRING	
APPROVED: MP	REV DATE	DO NOT SCALE DRAWING	DO NOT SCALE DRAWING
REV		SIZE A	QTY/MACHINE PART NUMBER N/A
REV		SCALE N/A	REV N/A
		SHEET 7 OF 26	

4 3 2 1

# VOLTAGE REGULATOR



# UPGRADED VOLTAGE REGULATOR



MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
N/A		THE KEGEL CO.	
DESCRIPTION		VOLTAGE REGULATOR WIRING	
DO NOT SCALE DRAWING	DO NOT SCALE DRAWING	DO NOT SCALE DRAWING	DO NOT SCALE DRAWING
SIZE	QTY/MACHINE	PART NUMBER	
A	N/A	FLEX	2016
SCALE	N/A	SHEET	8 OF 26

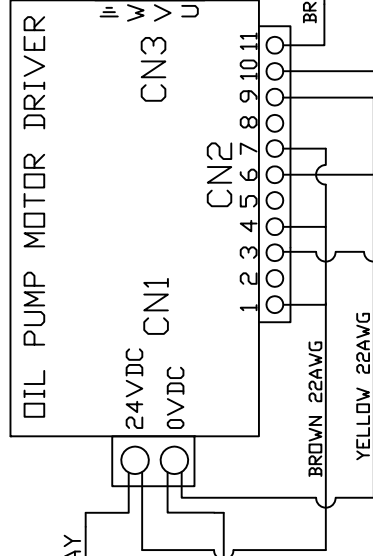
4 3 2 1

D C B A

# OIL PUMP MOTOR



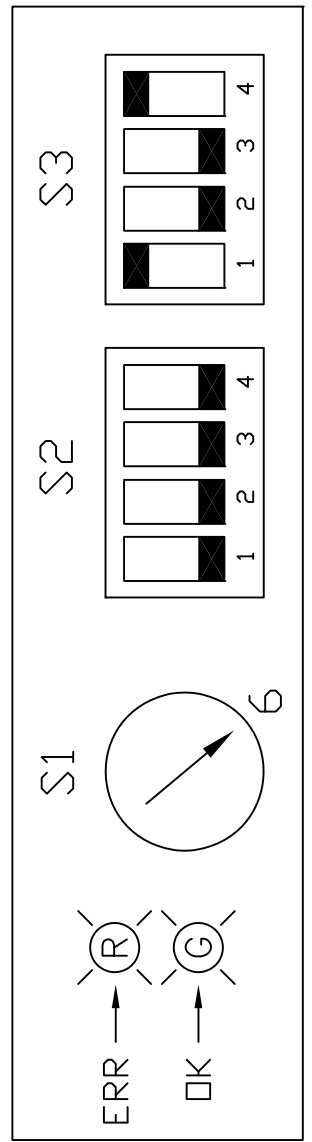
KEGEL P/N  
154-1266



PLC INPUTS  
BROWN/YELLOW 0CH #09



OIL HEAD DRIVER CN2 #11



MATERIAL N/A		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 734-0200	
DRAWN BY SLS	DATE 07/21/15	DESCRIPTION OIL PUMP DRIVER & MOTOR WIRING	
APPROVED: MP	REV DATE	DO NOT SCALE DRAWING	SIZE QTY/MACHINE PART NUMBER
DOC REV	SCALE N/A	A N/A	FLEX 2016
		SHEET 9	OF 26

# OIL HEAD MOTOR

M

YELLOW/BLACK  
WHITE/BLUE  
RED/DRANGE

KEGEL P/N  
154-1266  
FU9

JUMPED FROM  
OIL PUMP  
FUSE

2.25A  
WT/RD

WHITE/RED  
PL4-10

24VDC  
CN1

10VDC  
CN2

OIL HEAD DRIVER

W V U  
CN3

1 2 3 4 5 6 7 8 9 10 11  
CN2

BROWN/YELLOW  
PL5-8

PL5-8

BROWN/YELLOW

OIL PUMP MOTOR  
DRIVER CN2 #10

BLACK  
PL4-11

BLACK

BROWN 22AWG  
YELLOW 22AWG

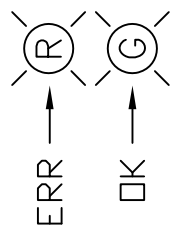
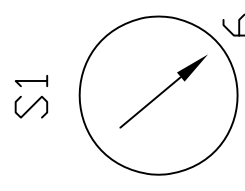
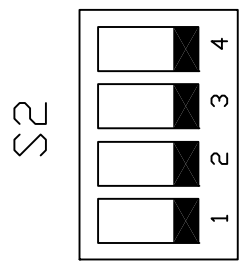
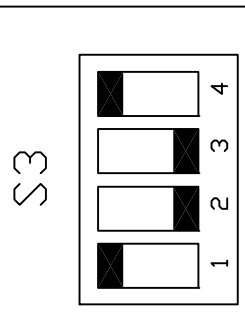
WHITE  
BLACK

SHIELDED WIRE

WHITE  
BLACK

PLC OUTPUTS  
CH100 #05

PLC OUTPUTS  
CH100 #04



ERR → (R)

OK → (G)

S1

S2

S3

ERR → (R)

OK → (G)

MATERIAL  
N/A

DRAWN BY  
SLS

DATE  
07/21/15

APPROVED:  
MP

DO NOT SCALE DRAWING  
SIZE QTY/MACHINE PART NUMBER

A N/A

FLEX 2016

SCALE N/A

SHEET 10

OF 26

DESCRIPTION  
OIL HEAD DRIVER & MOTOR WIRING

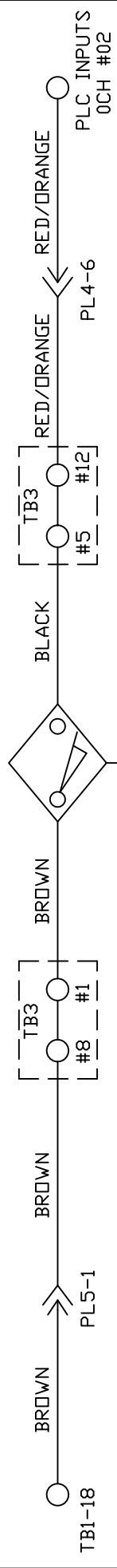
THE KEGEL CO. (689) 734-0200  
1951 LONGLEAF BLVD.  
LAKE WALES, FL 33869

4 3 2 1

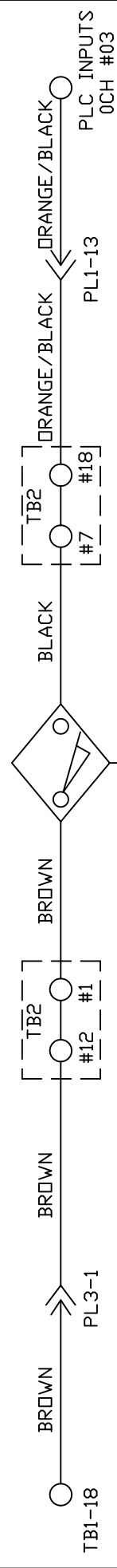
1 2 3 4

4 3 2 1

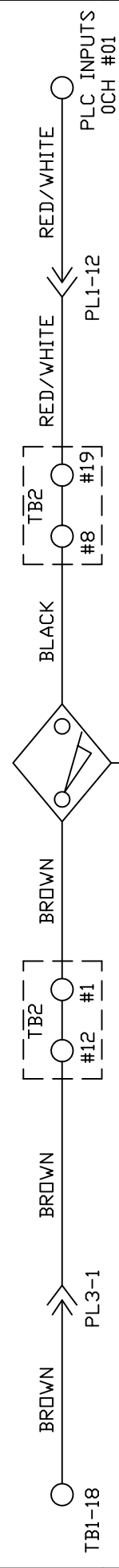
### L-R HEAD PROX



### R-L HEAD PROX



### BOARD PROX



MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33609	
N/A		THE KEGEL CO. (888) 734-0200	
DESCRIPTION			
L-R, R-L & BOARD PROX WIRING			
DRAWN BY	DATE	DO NOT SCALE DRAWING	
SLS	07/21/15	SIZE	QTY/MACHINE PART NUMBER
APPROVED:	REV DATE	A	N/A
MP		SCALE	FLEX 2016
DWG REV		SHEET	11 OF 26

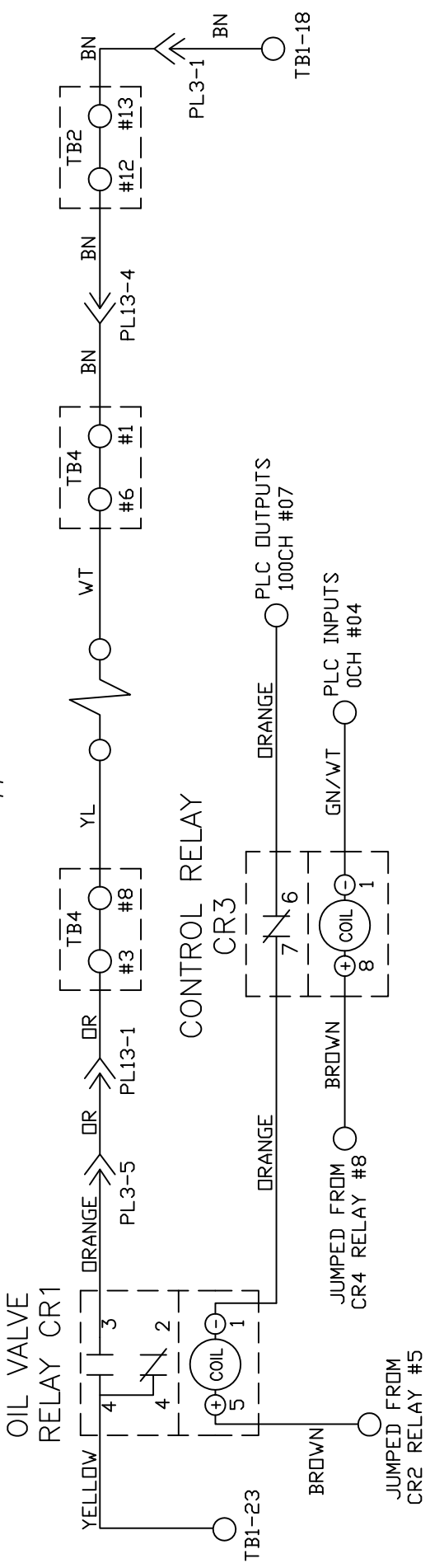
D C B A

D C B A

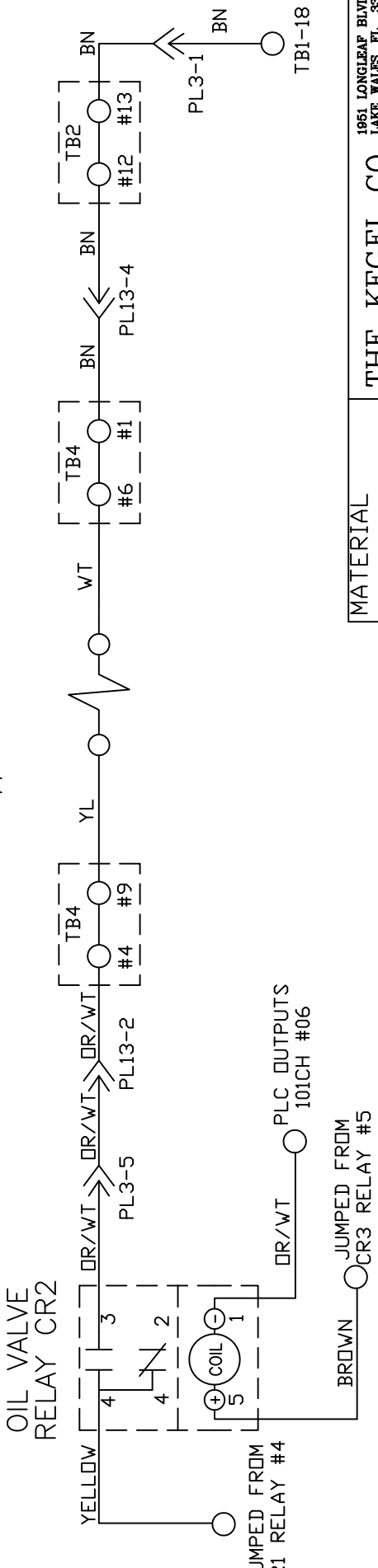


4 3 2 1

# OIL VALVE #1 - TANK A



# OIL VALVE #2 - TANK B



MATERIAL		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
DESCRIPTION		OIL VALVES RELAY WIRING	
DATE	07/21/15	DO NOT SCALE DRAWING	
REV DATE		SIZE	QTY/MACHINE PART NUMBER
MP		A	N/A
SCALE	N/A	FLEX	2016
SHEET	12	OF	26

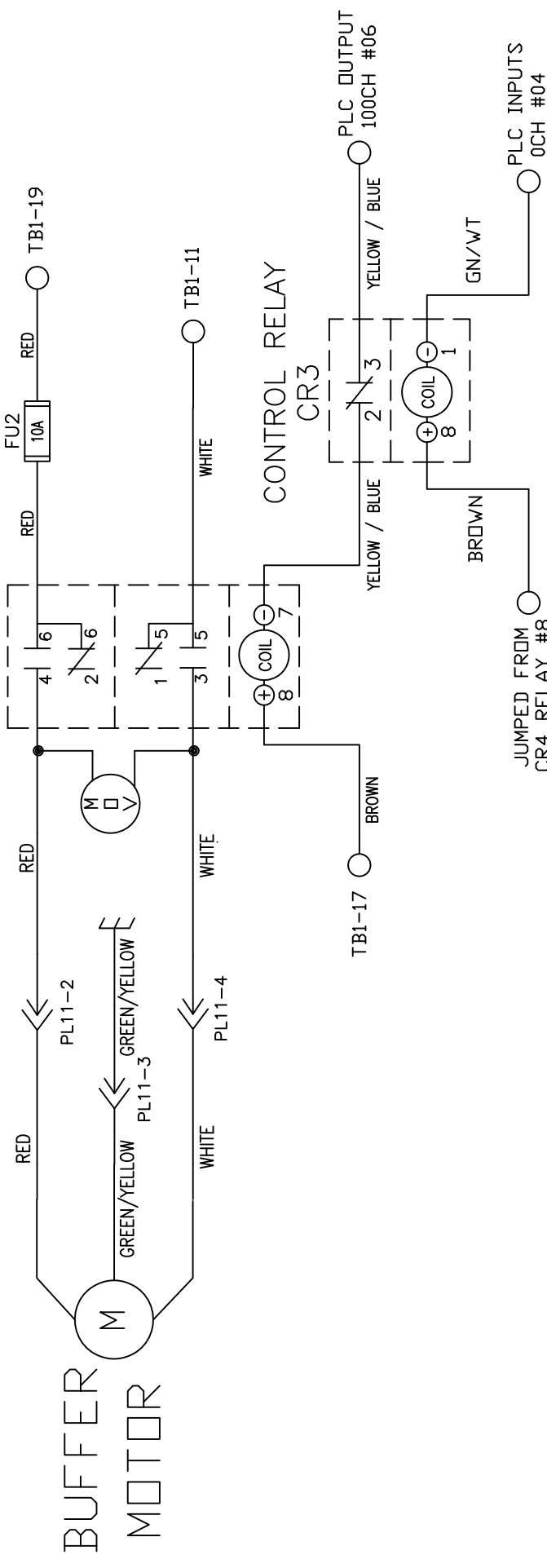
4 3 2 1

4 3 2 1

D C B A

BUFFER MOTOR RELAY CR13

KEGEL P/N  
154-1273

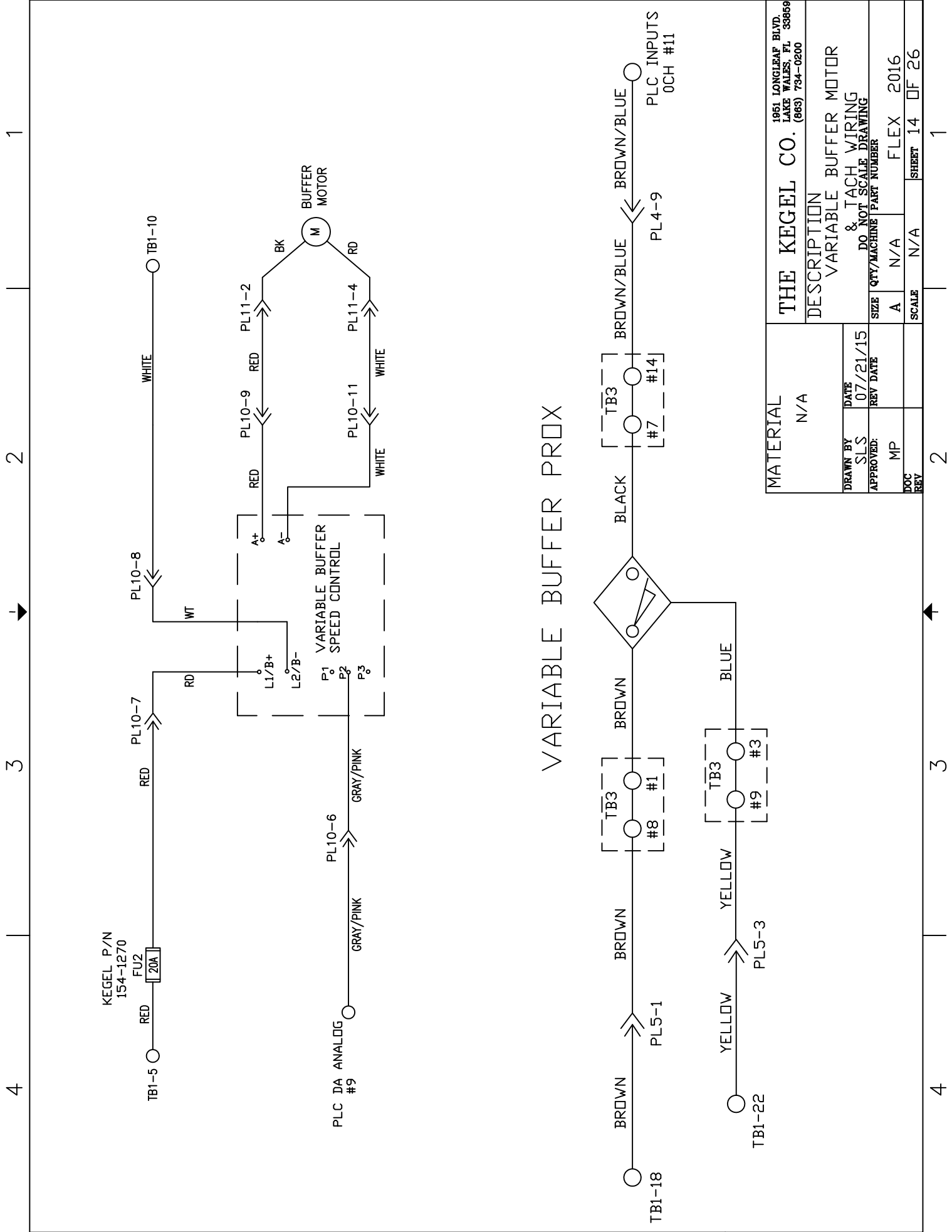


BUFFER MOTOR

MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		BUFFER MOTOR WIRING	
DRAWN BY	DATE	SIZE	QTY/MACHINE	SCALE	SHEET
SLS	07/21/15	A	N/A	N/A	13
APPROVED:	REV DATE	MP	FLEX	2016	OF 26
DOC	REV				

4 3 2 1

D C B A



4 3 2 1

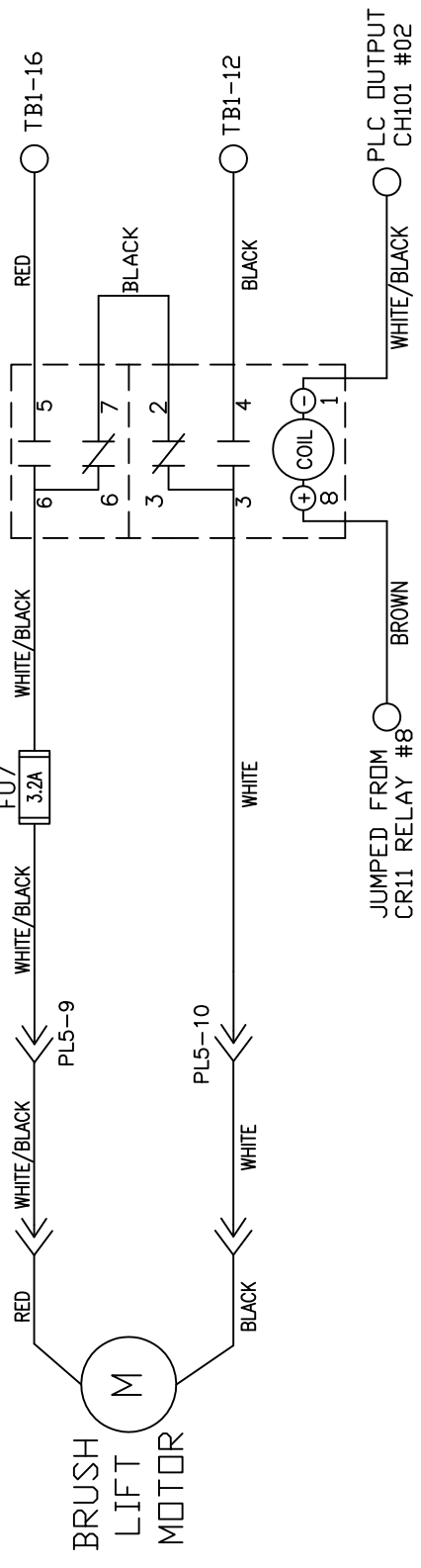
MATERIAL		THE KEGEL CO. (668) 734-0200	
N/A		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
DRAWN BY	DATE	DESCRIPTION	
SLS	07/21/15	VARIABLE BUFFER MOTOR	
APPROVED:	REV DATE	& TACH WIRING	
MP		DO NOT SCALE DRAWING	
		SIZE	QTY/MACHINE PART NUMBER
		A	N/A
DOC	REV	SCALE	N/A
			FLEX 2016
			SHEET 14 OF 26

4 3 2 1

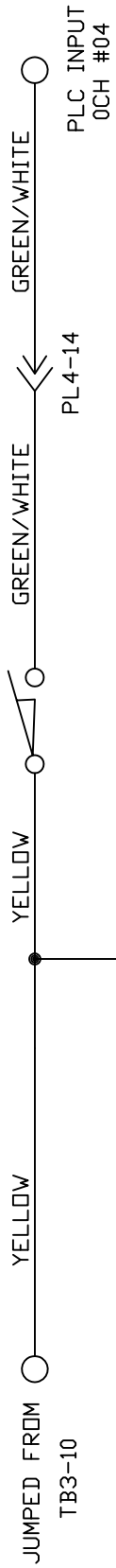
D C B A

### BRUSH LIFT MOTOR RELAY CR10

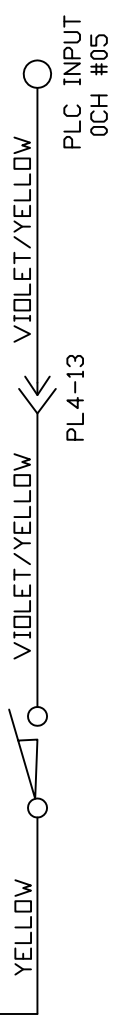
KEGEL P/N  
154-1267  
FU7  
3.2A



### BRUSH UP SWITCH



### BRUSH DOWN SWITCH



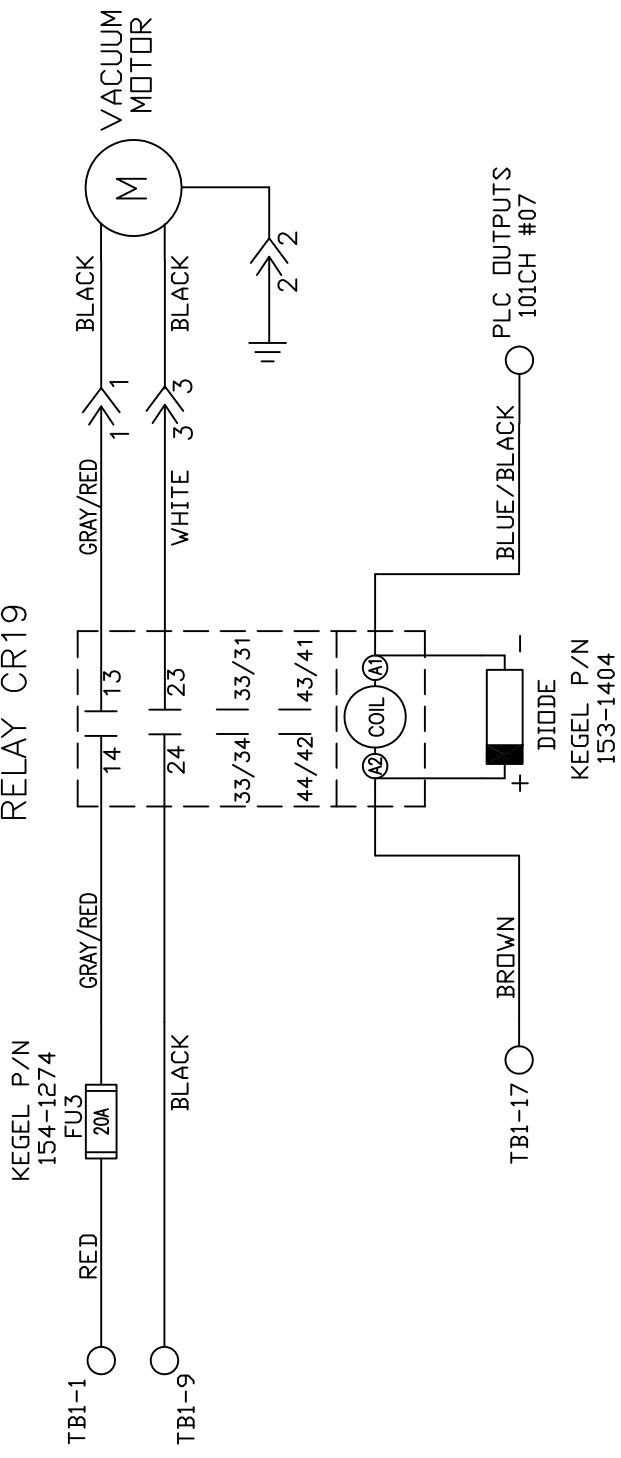
MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 734-0200	
N/A		DESCRIPTION			
DRAWN BY SLS		BRUSH LIFT MOTOR & SWITCH WIRING DO NOT SCALE DRAWING			
DATE 07/21/15		SIZE A		QTY/MACHINE PART NUMBER N/A	
APPROVED: MP		REV DATE		SCALE N/A	
DOC REV		MP		SHEET 15 OF 26	
				FLEX 2016	

4 3 2 1

4 3 2 1

D C B A

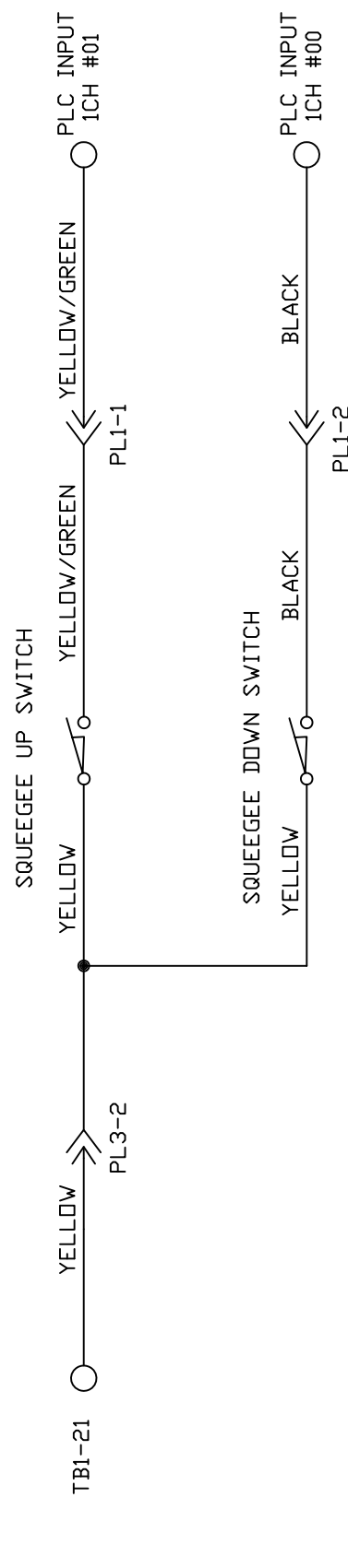
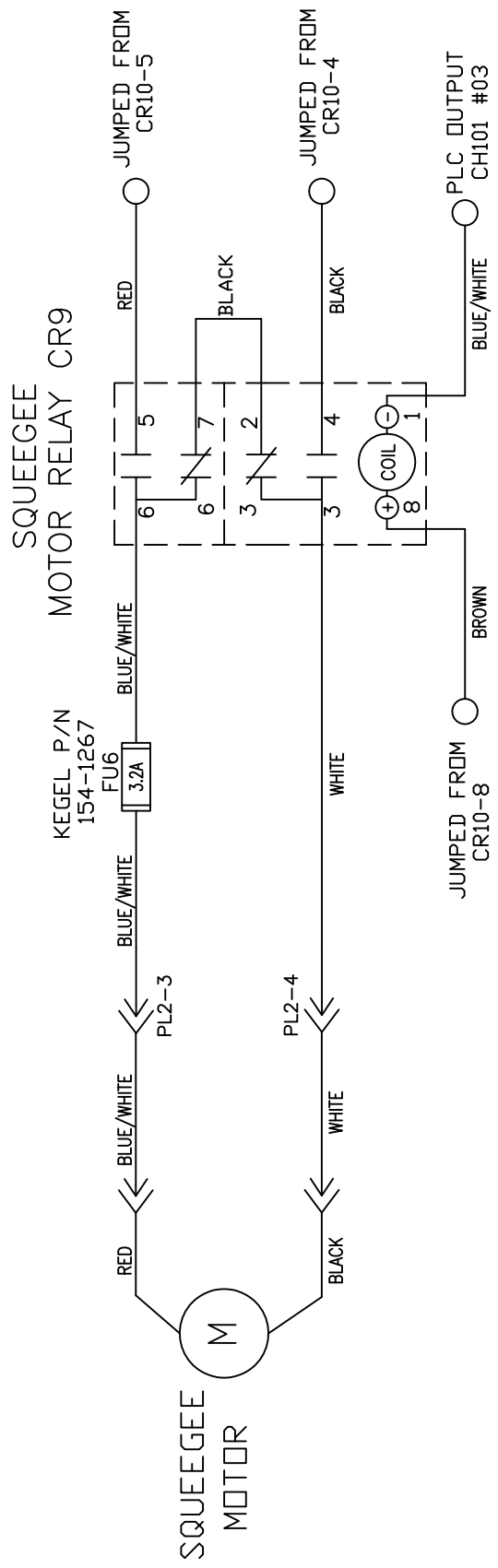
VACUUM MOTOR  
RELAY CR19



MATERIAL		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
N/A		DESCRIPTION VACUUM MOTOR WIRING	
DRAWN BY	DATE	DO NOT SCALE DRAWING	
SLS	07/21/15	SIZE	QTY/MACHINE PART NUMBER
APPROVED:	REV DATE	A	N/A
MP		SCALE	N/A
DWG REV		SHEET	16 OF 26

4 3 2 1

4 3 2 1



MATERIAL		THE KEGEL CO. (689) 734-0200	
N/A		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
DESCRIPTION	SQUEEGEE MOTOR & SWITCH WIRING DO NOT SCALE DRAWING		
DATE	07/21/15	SIZE	A
REV DATE		QTY/MACHINE PART NUMBER	N/A
MP		SCALE	N/A
DOC REV		SHEET	17 OF 26

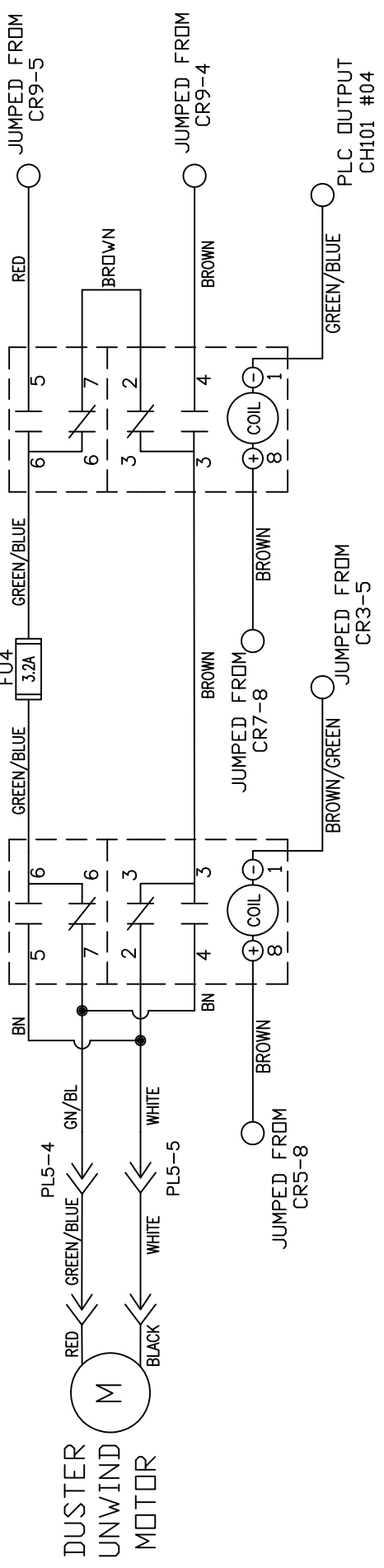
1 2 3 4

4 3 2 1

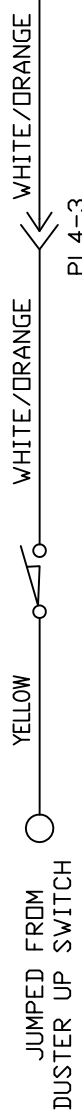
DUSTER POLARITY RELAY CR4

DUSTER UNWIND MOTOR RELAY CR8

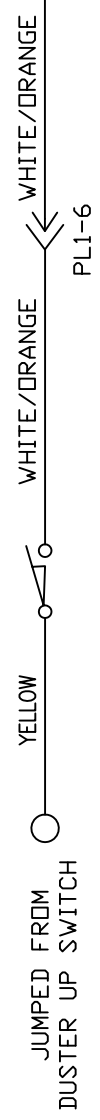
KEGEL P/N 154-1267  
FU4 3.2A



7-PIN SIDE FAIL SAFE SWITCH



10-PIN SIDE FAIL SAFE SWITCH



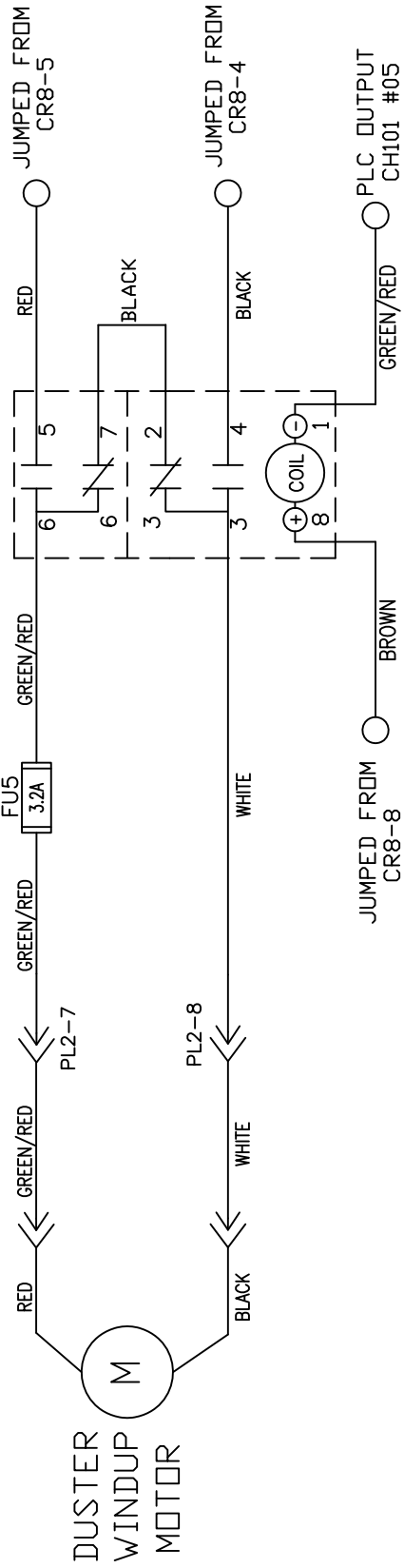
MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		DESCRIPTION		DUSTER UNWIND & SWITCH WIRING	
DRAWN BY	DATE	SIZE	QTY/MACHINE	SCALE	SHEET
SLS	07/21/15	A	N/A	N/A	18 OF 26
APPROVED:	REV DATE	MP	N/A	FLEX	2016
DOC	REV	MP	N/A	SCALE	18 OF 26

4 3 2 1

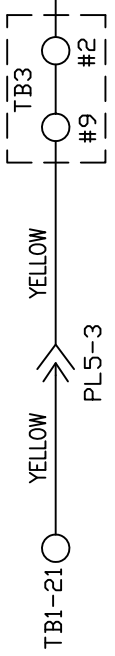
4 3 2 1

DUSTER WINDUP  
MOTOR RELAY CR7

KEGEL P/N  
154-1267  
FU5  
3.2A



7-PIN SIDE  
DUSTER UP SWITCH



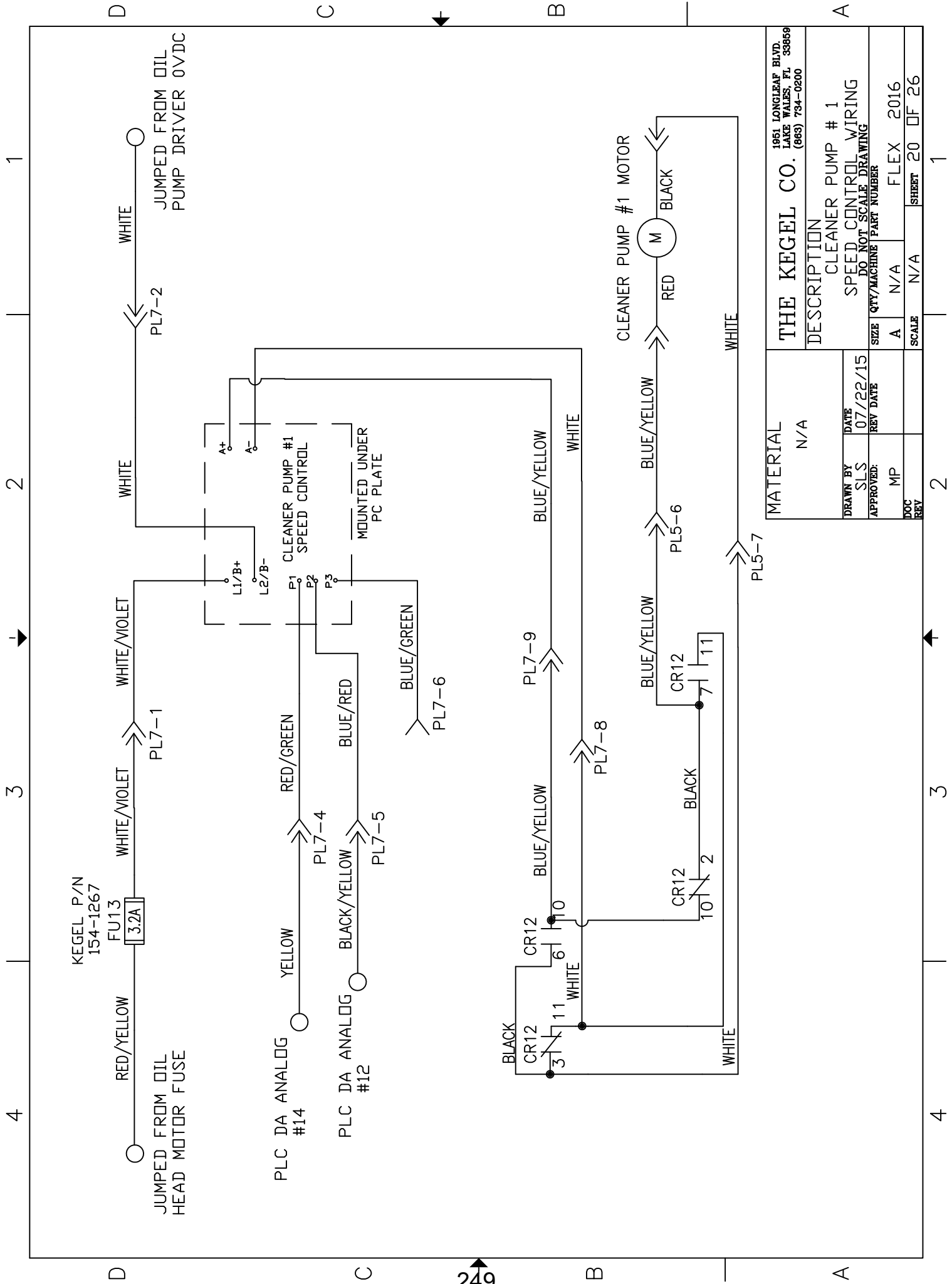
10-PIN SIDE  
DUSTER UP SWITCH



MATERIAL		THE KEGEL CO. (689) 734-0200	
N/A		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
DESCRIPTION	DUSTER WINDUP & SWITCH WIRING DO NOT SCALE DRAWING		
DRAWN BY	DATE	SIZE	QTY/MACHINE PART NUMBER
SLS	07/21/15	A	N/A
APPROVED:	REV DATE	SCALE	N/A
MP			FLEX 2016
DWG REV			SHEET 19 OF 26

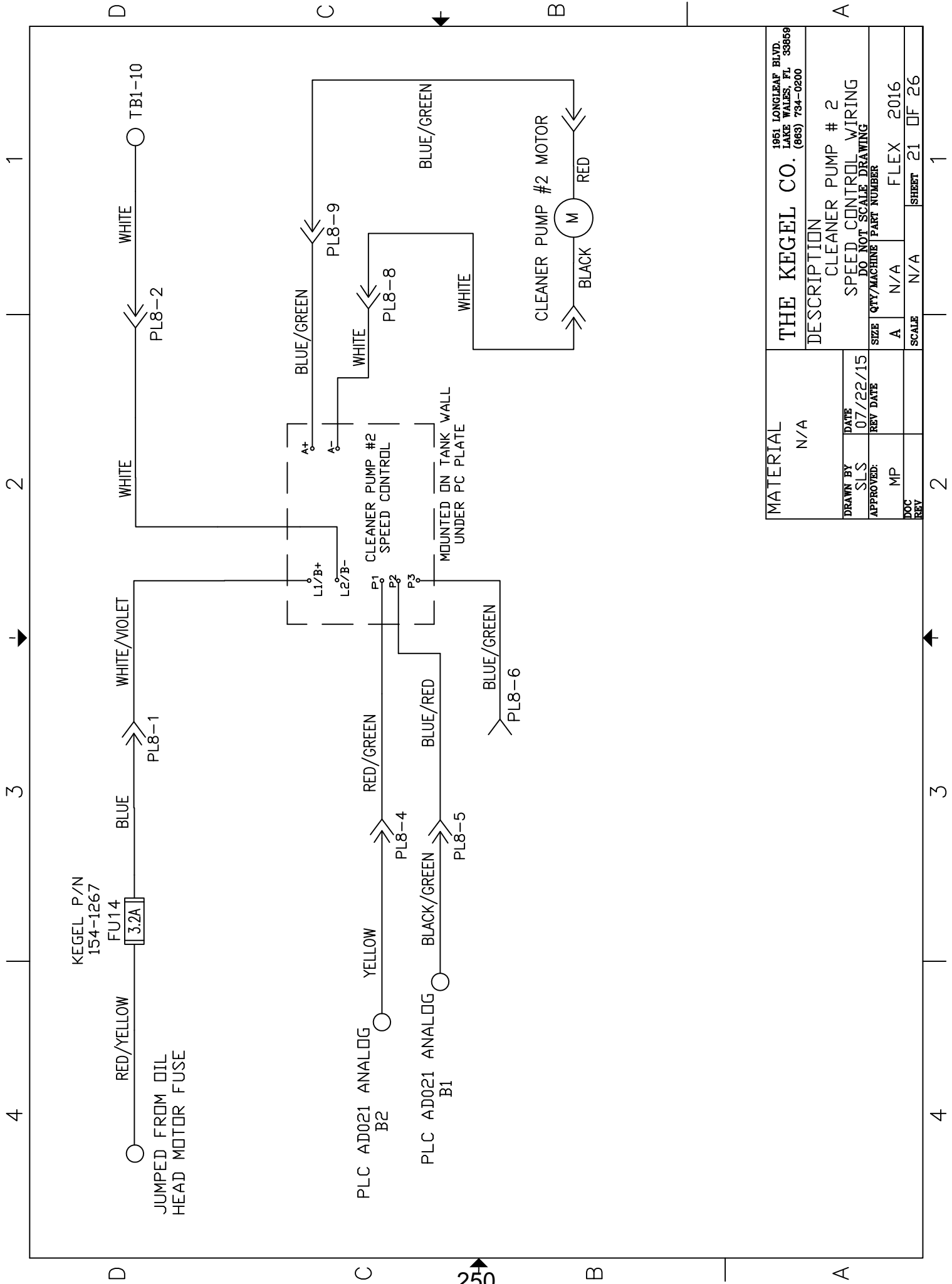
4 3 2 1





MATERIAL		N/A	
DRAWN BY	DATE	DESCRIPTION	
SLS	07/22/15	CLEANER PUMP # 1	
APPROVED:	REV DATE	SPEED CONTROL WIRING	
MP		DO NOT SCALE DRAWING	
DOC	SIZE	QTY/MACHINE	PART NUMBER
REV	A	N/A	FLEX 2016
	SCALE	N/A	SHEET 20 OF 26

THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 734-0200	
DESCRIPTION		CLEANER PUMP # 1	
SPEED CONTROL WIRING		DO NOT SCALE DRAWING	
SIZE	QTY/MACHINE	PART NUMBER	
A	N/A	FLEX 2016	
SCALE	N/A	SHEET 20	OF 26



KEGEL P/N  
154-1267

FU14  
3.2A

BLUE

WHITE/VIOLET

WHITE

WHITE

TB1-10

JUMPED FROM OIL  
HEAD MOTOR FUSE

PLC AD021 ANALOG  
B2

YELLOW

RED/GREEN

CLEANER PUMP #2  
SPEED CONTROL

A+

A-

WHITE

BLUE/GREEN

PLC AD021 ANALOG  
B1

BLACK/GREEN

BLUE/RED

BLUE/GREEN

B1

PL8-4

PL8-5

PL8-8

PL8-9

BLUE/GREEN

PL8-6

CLEANER PUMP #2 MOTOR

BLACK

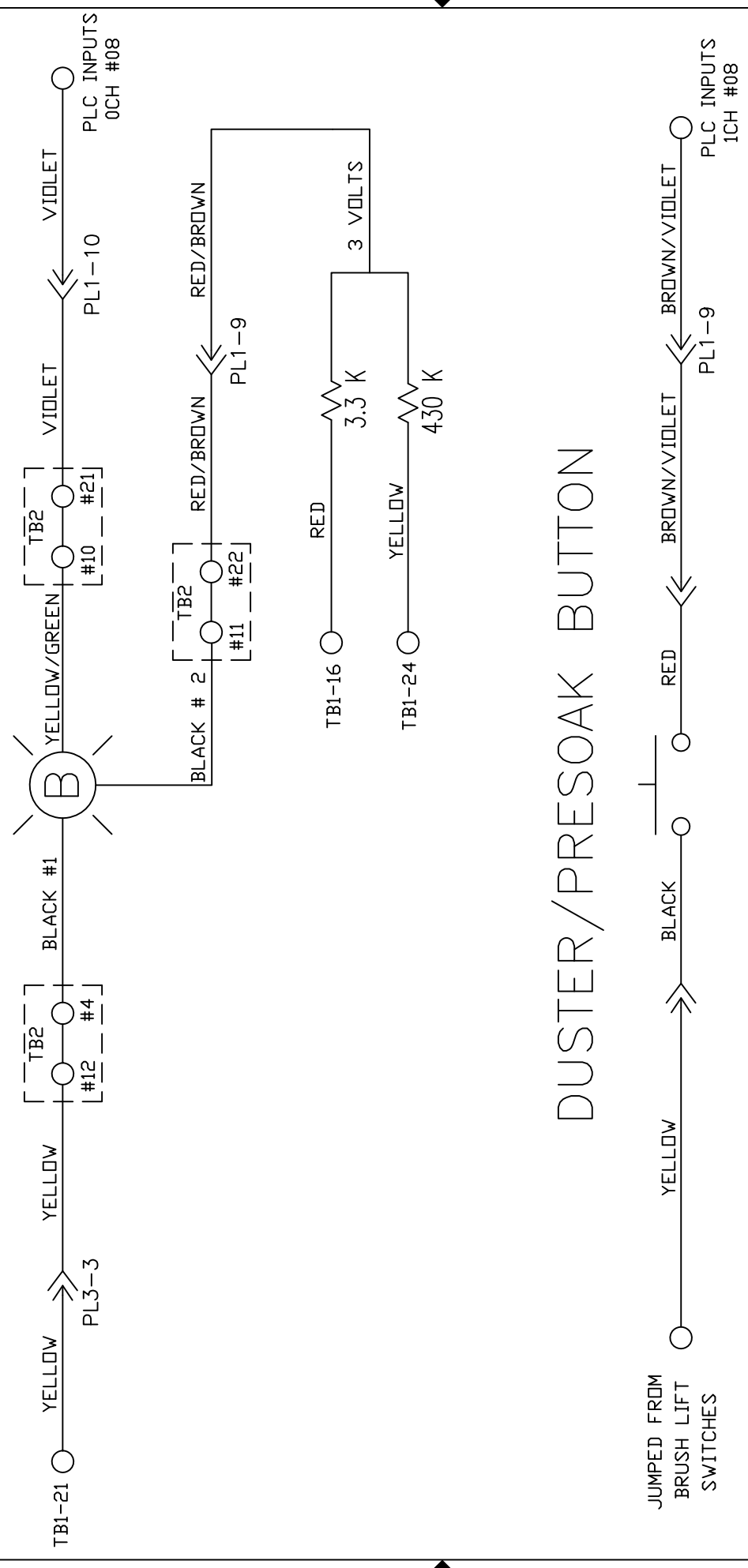
RED

M

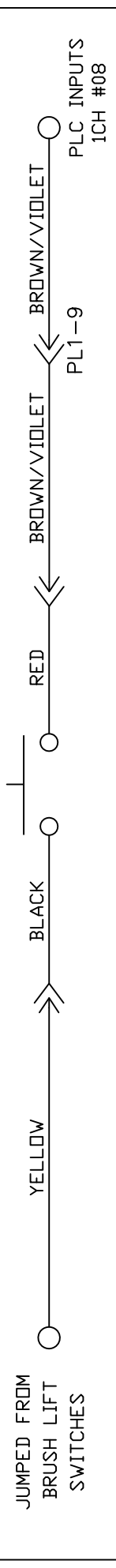
MATERIAL		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		DESCRIPTION	
CLEANER PUMP # 2		SPEED CONTROL WIRING	
DO NOT SCALE DRAWING		DO NOT SCALE DRAWING	
SIZE	QTY/MACHINE	PART NUMBER	
A	N/A	FLEX	2016
SCALE	N/A	SHEET	21 OF 26

4 3 2 1

# START BUTTON



# DUSTER/PRESOAK BUTTON

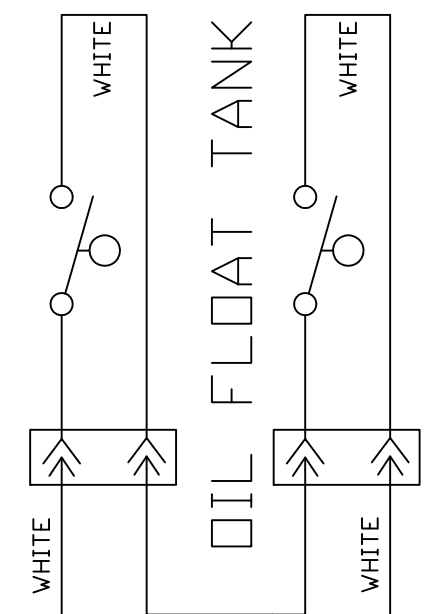


MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		THE KEGEL CO. (888) 734-0200	
DESCRIPTION			
START BUTTON & DUSTER/PRESOAK BUTTON DO NOT SCALE DRAWING			
DRAWN BY	DATE	SIZE	QTY/MACHINE PART NUMBER
SLS	07/22/15	A	N/A
APPROVED:	REV DATE	SCALE	N/A
MP			FLEX 2016
DWG REV			SHEET 22 OF 26

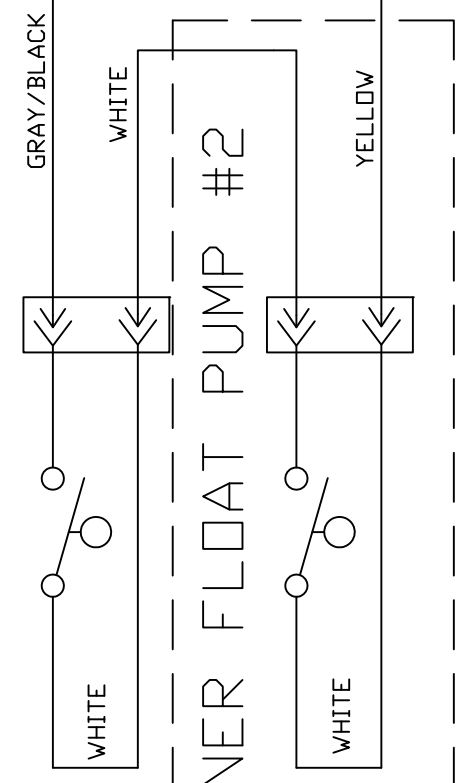
4 3 2 1

4 3 2 1

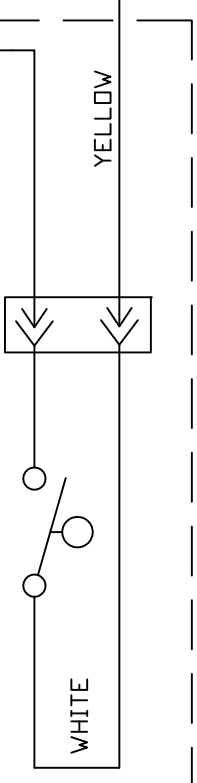
# OIL FLOAT TANK A



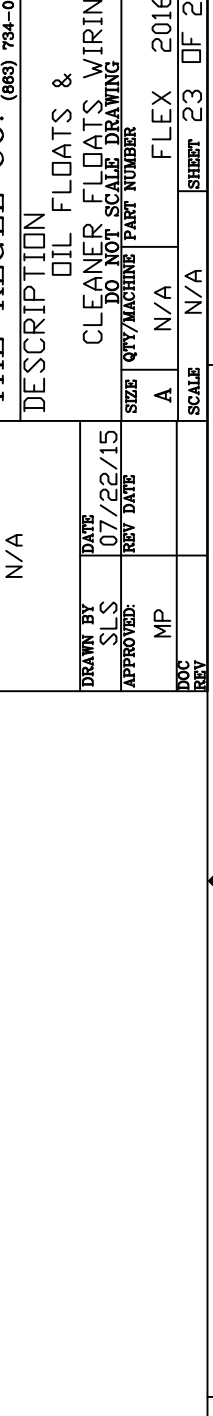
# CLEANER FLOAT PUMP #1



# CLEANER FLOAT PUMP #2



# OPTIONAL CLEANER UPGRADE

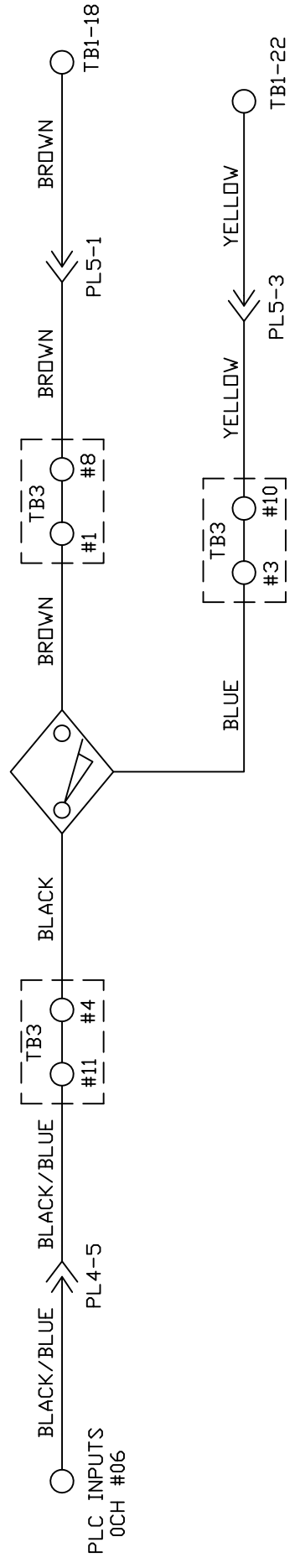


MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		THE KEGEL CO. (889) 734-0200	
DRAWN BY	DATE	DESCRIPTION	
SLS	07/22/15	OIL FLOATS & CLEANER FLOATS WIRING	
APPROVED:	REV DATE	DO NOT SCALE DRAWING	
MP		SIZE	QTY/MACHINE PART NUMBER
		A	N/A
DOC		SCALE	N/A
REV			FLEX 2016
			SHEET 23 OF 26

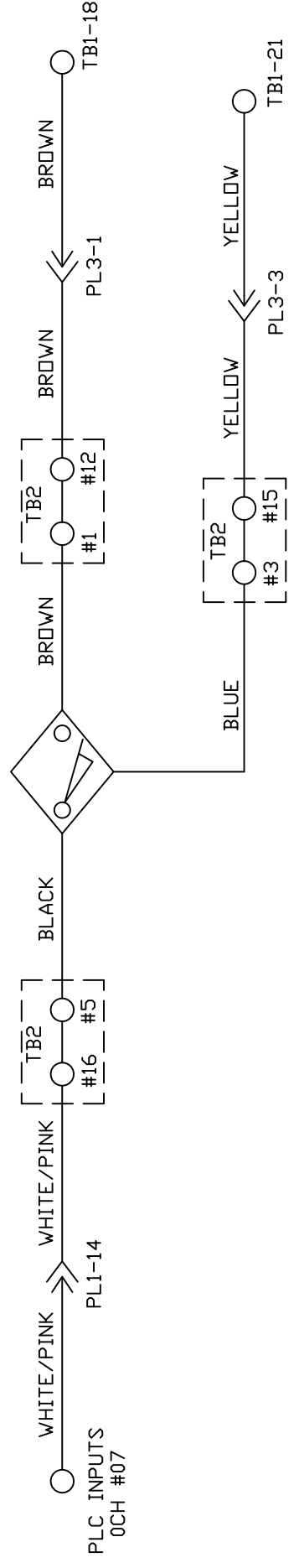
4 3 2 1

4 3 2 1

# SPEED TACH PROX



# LANE DISTANCE PROX



MATERIAL		N/A	
DRAWN BY	DATE	SPEED TACH & LANE DISTANCE WIRING	
SLS	07/22/15	DO NOT SCALE DRAWING	
APPROVED:	REV DATE	SIZE	QTY/MACHINE PART NUMBER
MP		A	N/A
DOC		SCALE	N/A
REV			

4 3 2 1

THE KEGEL CO.  
1951 LONGLEAF BLVD.  
LAKE WALES, FL 33869  
(888) 734-0200

DESCRIPTION  
SPEED TACH &  
LANE DISTANCE WIRING  
DO NOT SCALE DRAWING

SIZE QTY/MACHINE PART NUMBER  
A N/A FLEX 2016  
SCALE N/A SHEET 24 OF 26

4 3 2 1

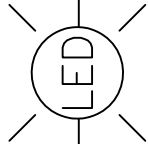
TB1-15

KEGEL P/N  
155-1229  
FUJ16  
1A

PL4-12

RED/GREEN

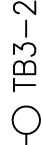
RED/GREEN



YELLOW/WHITE

YELLOW

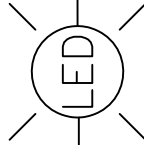
YELLOW



LED TANK  
LIGHT SWITCH

YELLOW

LED ARROW  
LIGHT



RED/GREEN

D

C

B

A

D

C

B

A

254

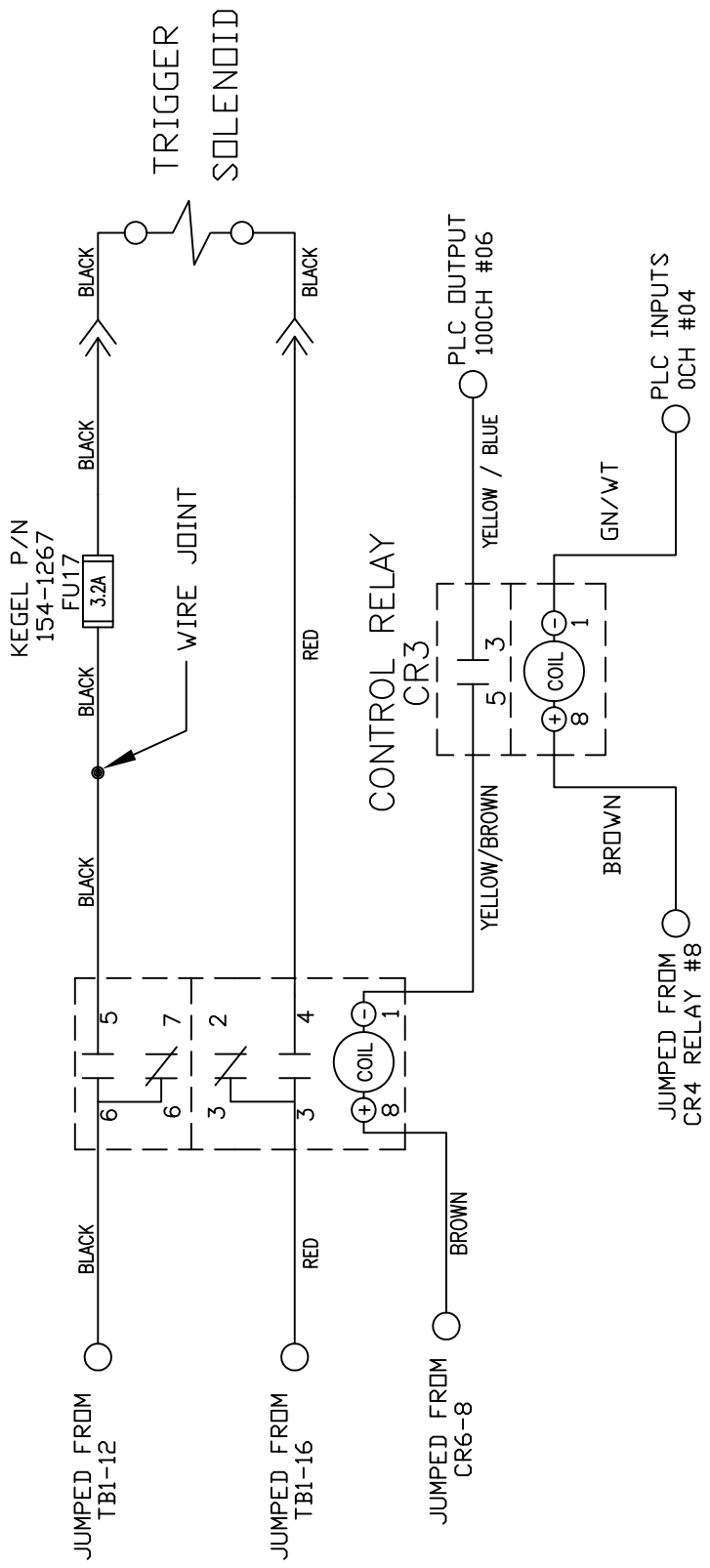
MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		LED TANK LIGHT WIRING	
DRAWN BY	DATE	DO NOT SCALE DRAWING		SIZE	QTY/MACHINE PART NUMBER
SLS	07/22/15			A	N/A
APPROVED:	REV DATE			SCALE	N/A
MP					FLEX 2016
DWG				SHEET	25 OF 26
REV					

4 3 2 1

4 3 2 1

D C B A

PIN DECK TREATMENT  
RELAY CR5



MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		THE KEGEL CO. (888) 734-0200	
DATE	07/22/15	DO NOT SCALE DRAWING	
REV DATE		SIZE	QTY/MACHINE PART NUMBER
MP		A	N/A FLEX 2016
DWG REV		SCALE	N/A SHEET 26 OF 26

4 3 2 1

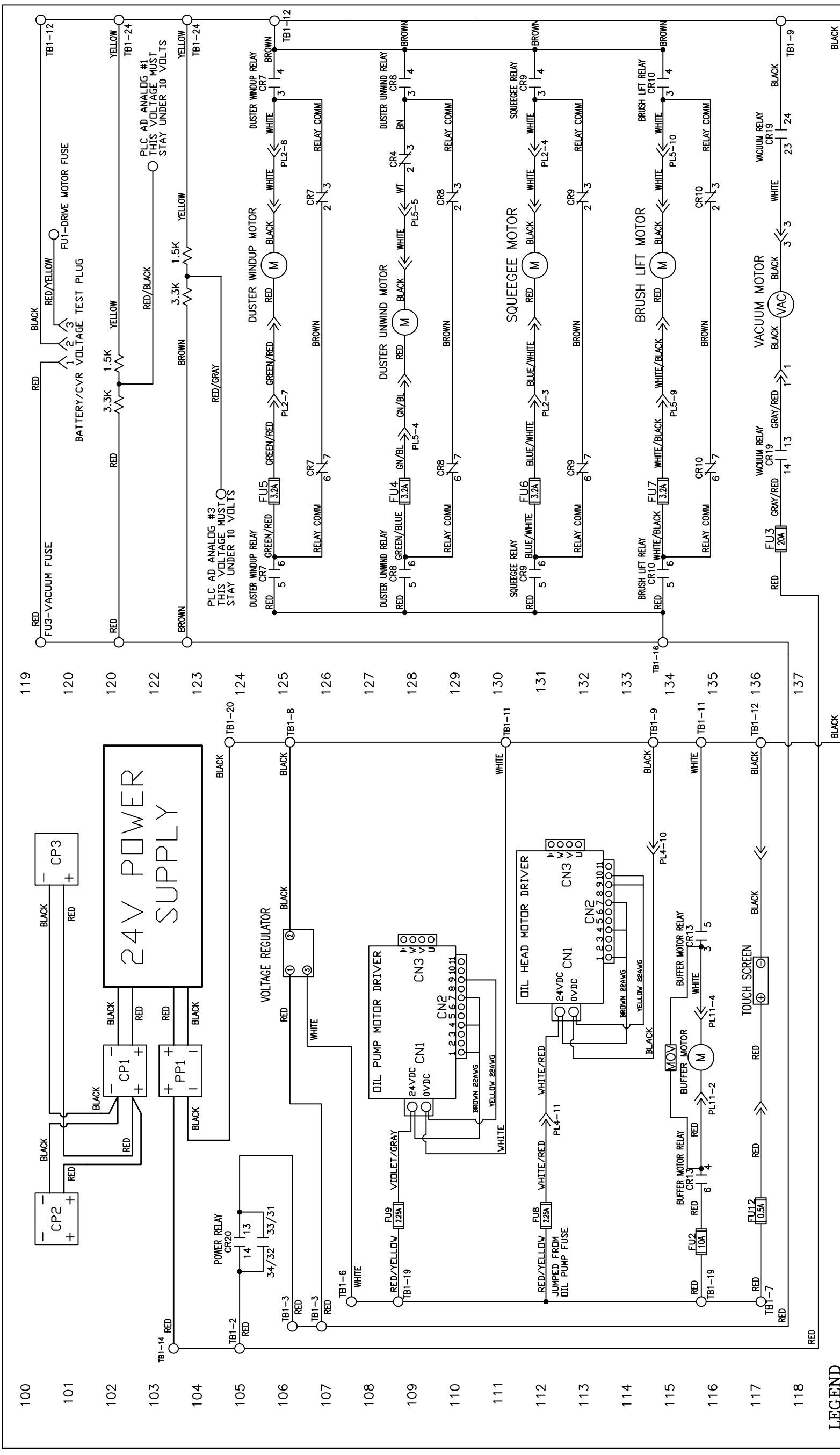




# FLEX WALKER ELECTRICAL DRAWING

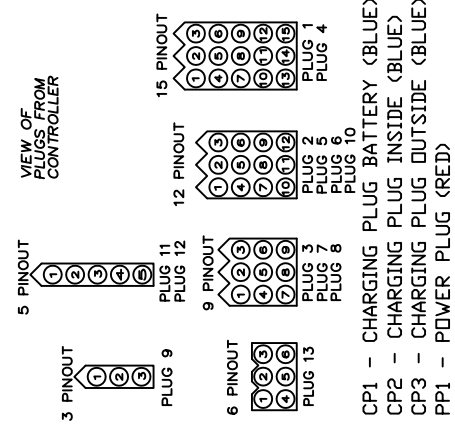
The following diagrams show wiring schematics for the Kustodian Walker. Detailed diagrams for the Ion follow this section. If you have any questions please call 863-734-0200 or email [tech@kegel.net](mailto:tech@kegel.net).

Flex Walker Motor Wiring Layout	257
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Flex Walker Bumper & Whisker Switch Wiring Layout	283



**LEGEND**

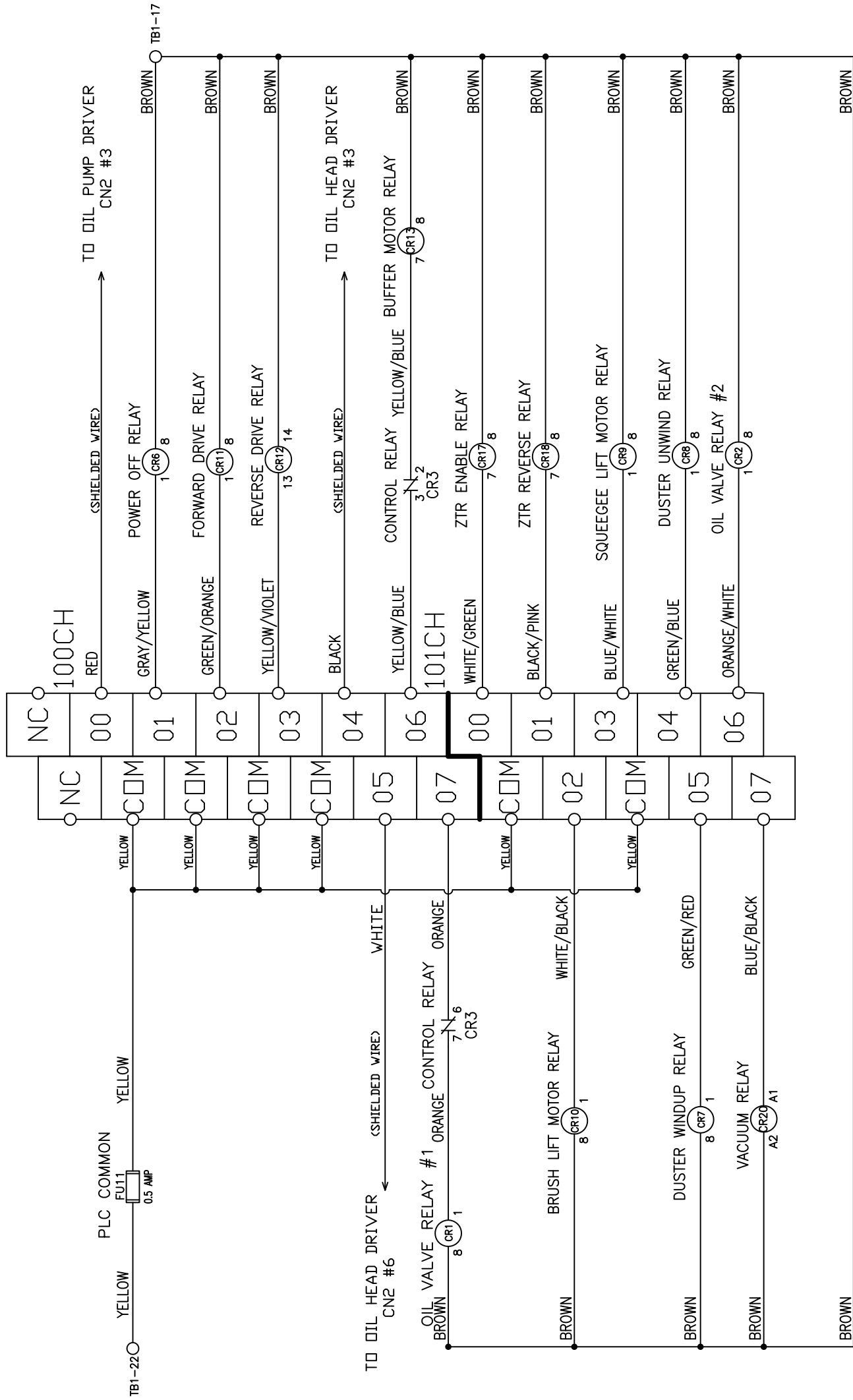
- CR1 - OIL VALVE RELAY TANK A
- CR2 - OIL VALVE RELAY TANK B
- CR3 - CONTROL RELAY
- CR4 - DUSTER POLARITY SWITCH RELAY
- CR5 - PIN DECK TREATMENT RELAY
- CR6 - POWER OFF RELAY
- CR7 - DUSTER WINDUP MOTOR RELAY
- CR8 - DUSTER UNWIND MOTOR RELAY
- CR9 - SQUEEGEE LIFT MOTOR RELAY
- CR10 - BRUSH LIFT MOTOR RELAY
- CR11 - FORWARD DRIVE MOTOR RELAY
- CR12 - REVERSE DRIVE MOTOR RELAY
- CR13 - BUFFER MOTOR RELAY
- CR14 - WHISKER ENABLE RELAY
- CR15 - WHISKER 7 PIN SIDE RELAY
- CR16 - WHISKER 10 PIN SIDE RELAY
- CR17 - ZTR ENABLE RELAY
- CR18 - ZTR REVERSE RELAY
- CR19 - VACUUM MOTOR RELAY
- CR20 - 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
- FU17 - TRIGGER SOLENOID 3.2A
- PL1 - 10-PIN SIDE PLUG (15)
- PL2 - 10-PIN SIDE PLUG (12)
- PL3 - 10-PIN SIDE PLUG (9)
- PL4 - 7-PIN SIDE PLUG (15)
- PL5 - 7-PIN SIDE PLUG (12)
- 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)



<b>MATERIAL</b>		N/A	
<b>DESCRIPTION</b>		MOTOR WIRING SCHEMATIC	
<b>DRAWN BY</b>	SLS	<b>DATE</b>	07/17/15
<b>APPROVED:</b>	MP	<b>REV DATE</b>	
<b>DOC REV</b>		<b>SIZE</b>	QTY/MACHINE PART NUMBER
		<b>C</b>	N/A
		<b>SCALE</b>	N/A
		<b>SHEET</b>	1 OF 27

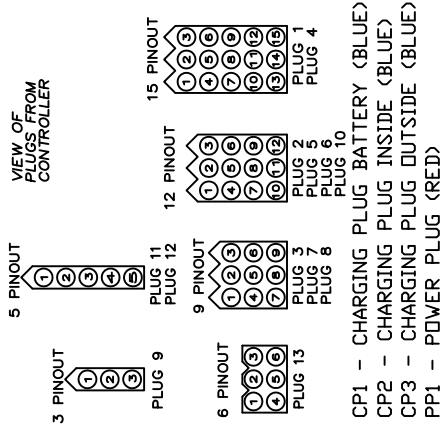
1961 LONGLEAF BLVD.  
LAKE WALES, FL 33859  
(866) 784-0200

DMRON  
SYSMAC  
CPIH  
OUTPUTS



LEGEND

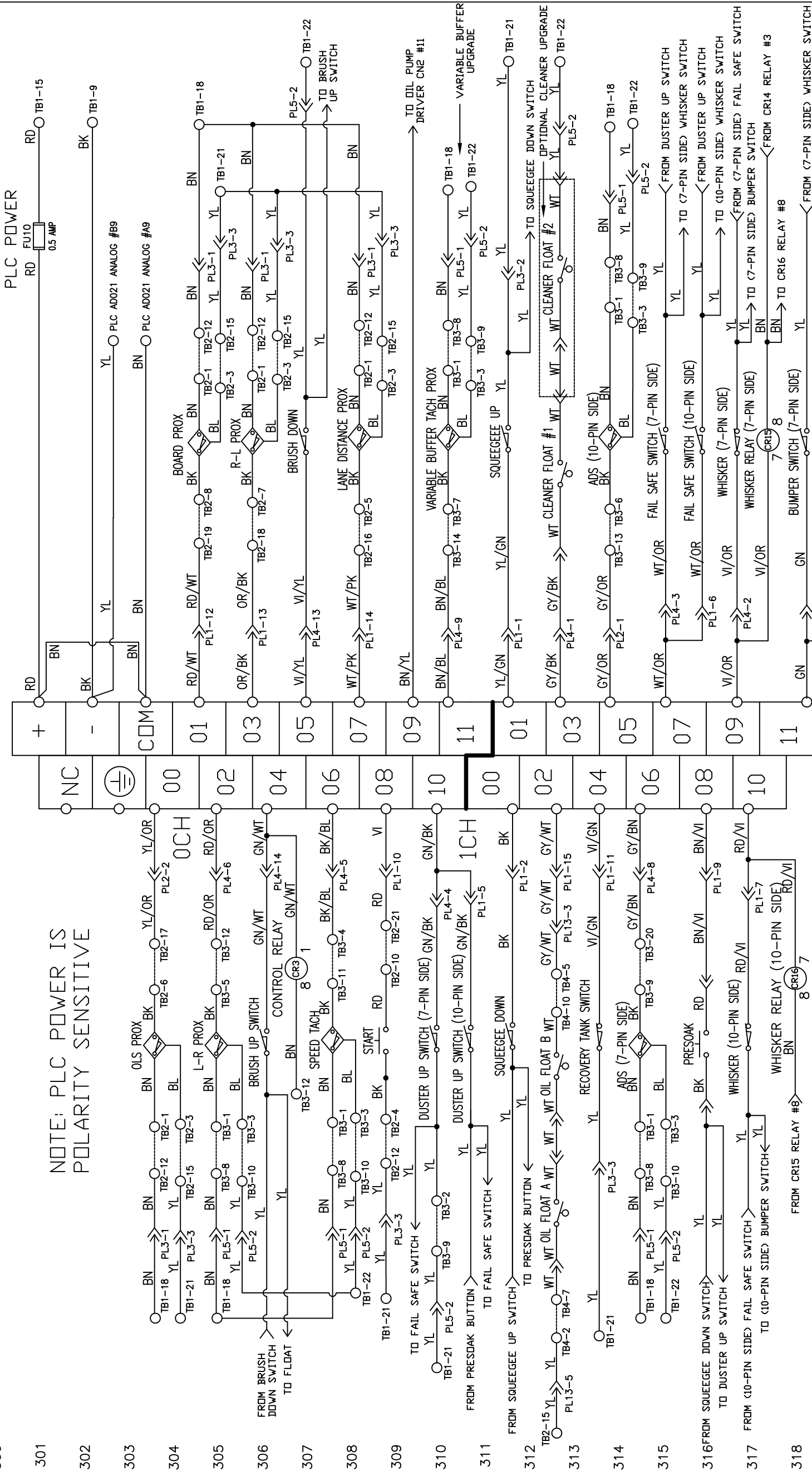
- CR1 - OIL VALVE RELAY TANK A
- CR2 - OIL VALVE RELAY TANK B
- CR3 - CONTROL RELAY
- CR4 - DUSTER POLARITY SWITCH RELAY
- CR5 - PIN DECK TREATMENT RELAY
- CR6 - POWER OFF RELAY
- CR7 - DUSTER WINDUP MOTOR RELAY
- CR8 - DUSTER UNWIND MOTOR RELAY
- CR9 - SQUEEGEE LIFT MOTOR RELAY
- CR10 - BRUSH LIFT MOTOR RELAY
- CR11 - FORWARD DRIVE MOTOR RELAY
- CR12 - REVERSE DRIVE MOTOR RELAY
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- CR15 - WHISKER 7 PIN SIDE RELAY
- CR16 - WHISKER 10 PIN SIDE RELAY
- CR17 - ZTR ENABLE RELAY
- CR18 - ZTR REVERSE RELAY
- CR19 - VACUUM MOTOR RELAY
- CR20 - POWER RELAY
- FU1 - DRIVE MOTOR 7.5A
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- 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
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- 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)



MATERIAL		N/A	
DESCRIPTION		OUTPUT WIRING SCHEMATIC	
DRAWN BY	DATE	DO NOT SCALE DRAWING	
SLS	07/20/15	SIZE	QTY/MACHINE PART NUMBER
APPROVED:	REV DATE	C	N/A
MP		SCALE	N/A
DOC REV		SHEET	2 OF 27

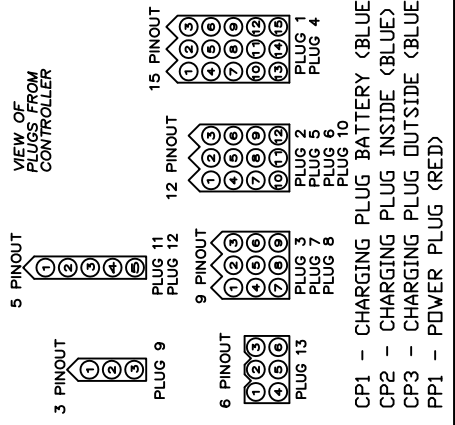
1951 LONGLEAF BLVD.  
LAKE WALES, FL 33869  
(888) 794-0200

NOTE: PLC POWER IS POLARITY SENSITIVE



LEGEND

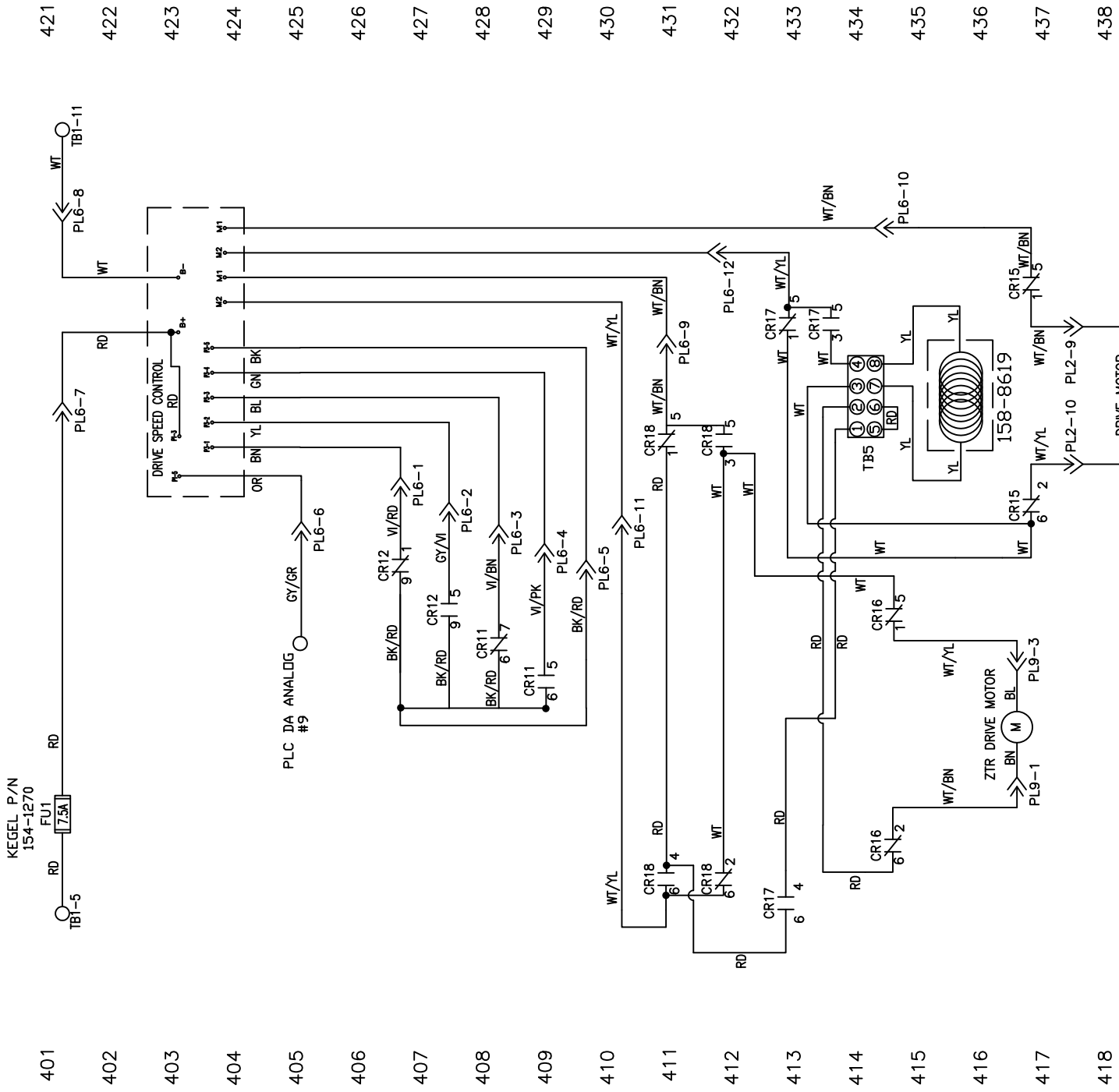
- CR1 - OIL VALVE RELAY TANK A
- CR2 - OIL VALVE RELAY TANK B
- CR3 - CONTROL RELAY
- CR4 - DUSTER POLARITY SWITCH RELAY
- CR5 - PIN DECK TREATMENT RELAY
- CR6 - POWER OFF RELAY
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- CR8 - DUSTER UNWIND MOTOR RELAY
- CR9 - SQUEEGEE LIFT MOTOR RELAY
- CR10 - BRUSH LIFT MOTOR RELAY
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- CR17 - ZTR ENABLE RELAY
- CR18 - ZTR REVERSE RELAY
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- CR20 - POWER RELAY
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- 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
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- FU14 - CLEANER PUMP #2 3.2A
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- TB3 - TERMINAL BLOCK 3 (7-PIN SIDE)
- TB4 - TERMINAL BLOCK 4 (OIL PLATE)
- TB5 - TERMINAL BLOCK 5 (TOP PLC PLATE)



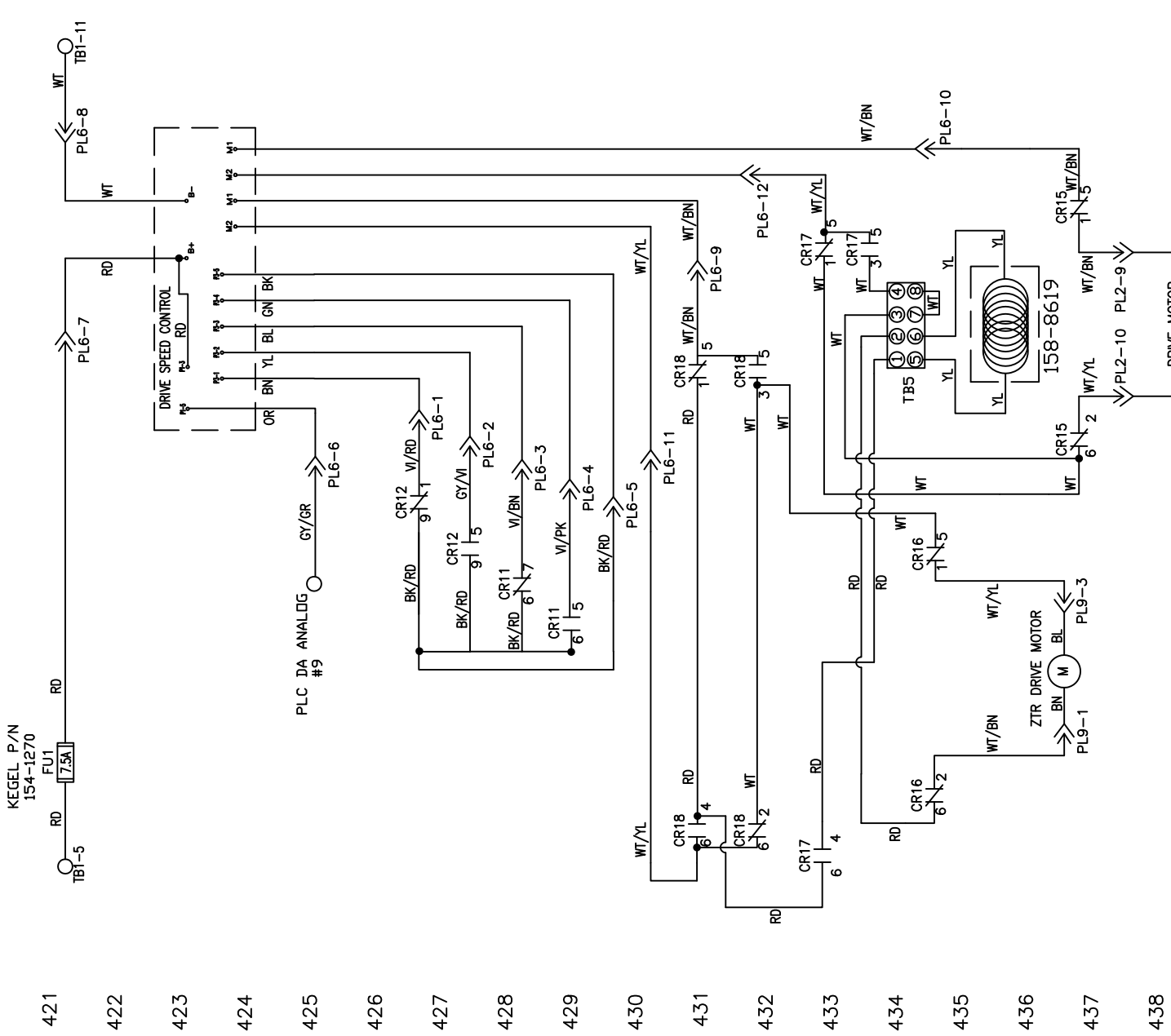
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DRAWN BY	DATE	SIZE	SCALE
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APPROVED:	REV DATE	QTY/MACHINE PART NUMBER	SHEET
MP		FLEX WALKER	2016
DOC REV			3 OF 27

1651 LONGLEAF BLVD.  
 LAKE WALKER, FL 33869  
 (866) 784-0200

SCHEMATIC FOR RESISTOR WIRE ON MAIN DRIVE MOTOR

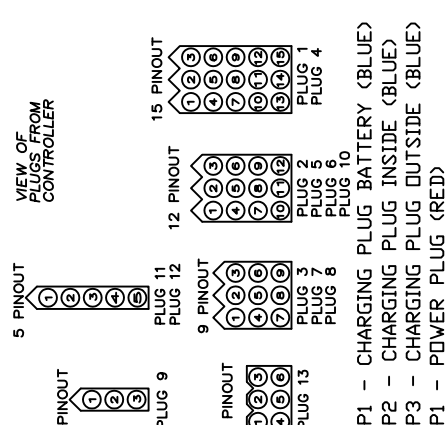


SCHEMATIC FOR RESISTOR WIRE ON ZTR DRIVE MOTOR



LEGEND

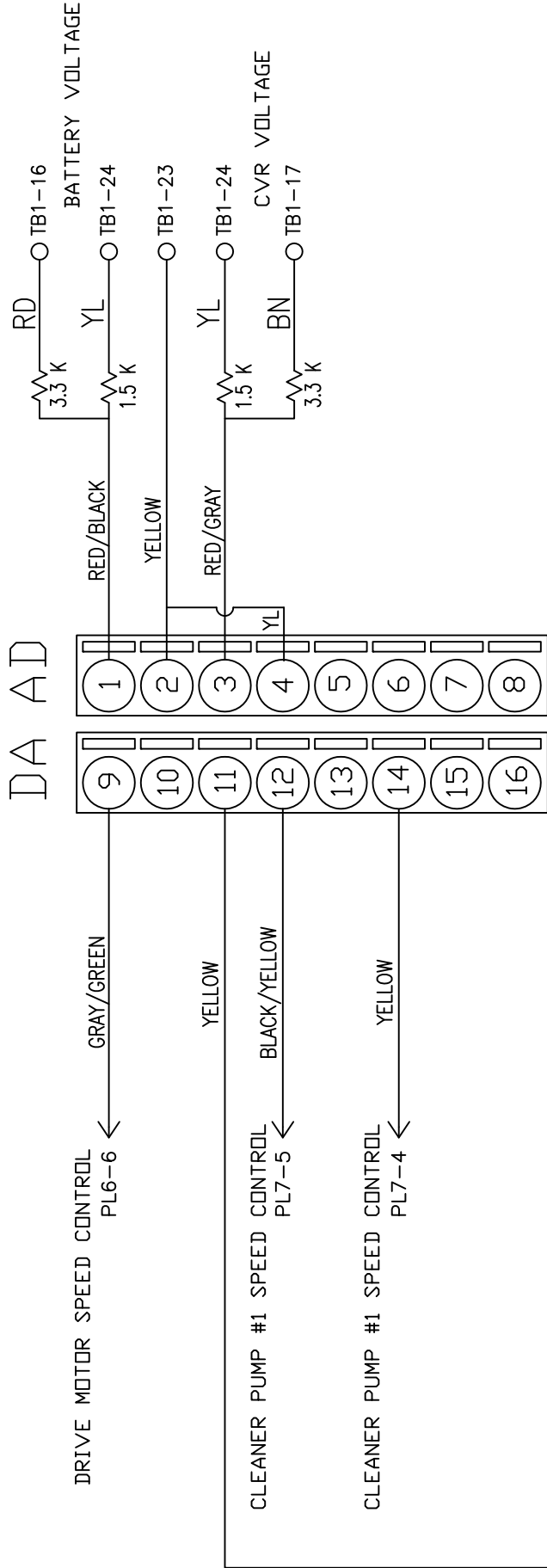
- CR1 - OIL VALVE RELAY TANK A
- CR2 - OIL VALVE RELAY TANK B
- CR3 - CONTROL RELAY
- CR4 - DUSTER POLARITY SWITCH RELAY
- CR5 - PIN DECK TREATMENT RELAY
- CR6 - POWER OFF RELAY
- CR7 - DUSTER WINDUP MOTOR RELAY
- CR8 - DUSTER UNWIND MOTOR RELAY
- CR9 - SQUEEGEE LIFT MOTOR RELAY
- CR10 - FORWARD DRIVE MOTOR RELAY
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- CR12 - BUFFER MOTOR RELAY
- CR13 - WHISKER ENABLE RELAY
- CR14 - WHISKER 7 PIN SIDE RELAY
- CR15 - WHISKER 10 PIN SIDE RELAY
- CR16 - ZTR ENABLE RELAY
- CR17 - ZTR REVERSE RELAY
- CR18 - VACUUM MOTOR RELAY
- CR20 - 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 - TOUCH SCREEN 0.5A
- FU12 - CLEANER PUMP #1 3.2A
- FU13 - CLEANER PUMP #2 3.2A
- FU14 - CVR POWER 25A/30A
- FU15 - LED LIGHTS 1A
- FU16 - TRIGGER SOLENOID 3.2A
- FU17 - TRIGGER SOLENOID 3.2A
- PL1 - 10-PIN SIDE PLUG (15)
- PL2 - 10-PIN SIDE PLUG (12)
- PL3 - 10-PIN SIDE PLUG (9)
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- PL5 - 7-PIN SIDE PLUG (12)
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- TB3 - TERMINAL BLOCK 3 (7-PIN SIDE)
- TB4 - TERMINAL BLOCK 4 (OIL PLATE)
- TB5 - TERMINAL BLOCK 5 (TOP PLC PLATE)



MATERIAL		N/A	
DESCRIPTION		SPEED CONTROL SCHEMATIC	
DATE	07/20/15	DO NOT SCALE DRAWING	
DRAWN BY	SLS	SIZE	C
APPROVED:	MP	QTY/MACHINE PART NUMBER	N/A
DOC REV		SCALE	N/A
		SHEET	4 OF 27

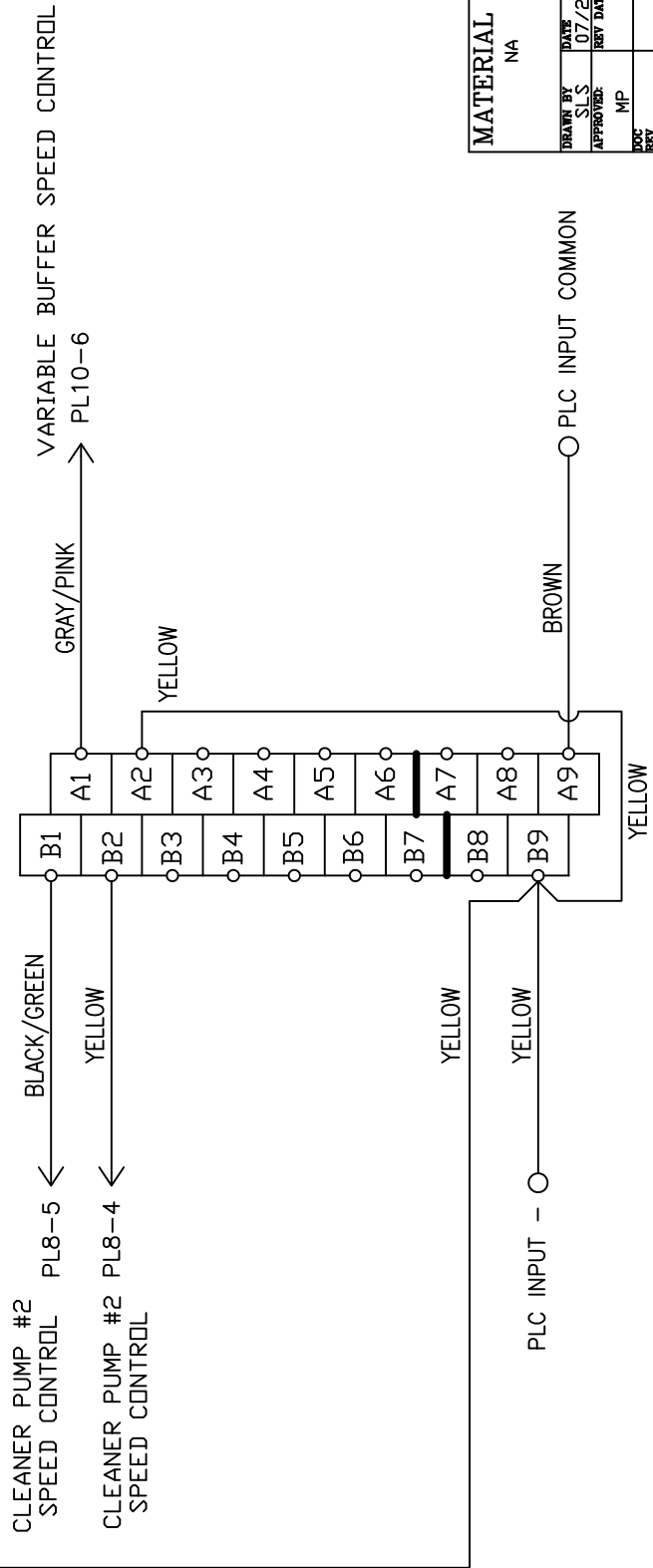
1961 LONGLEAF BLVD.  
LAKE WALES, FL 33869  
(866) 734-0200

# BUILT IN PLC ANALOG



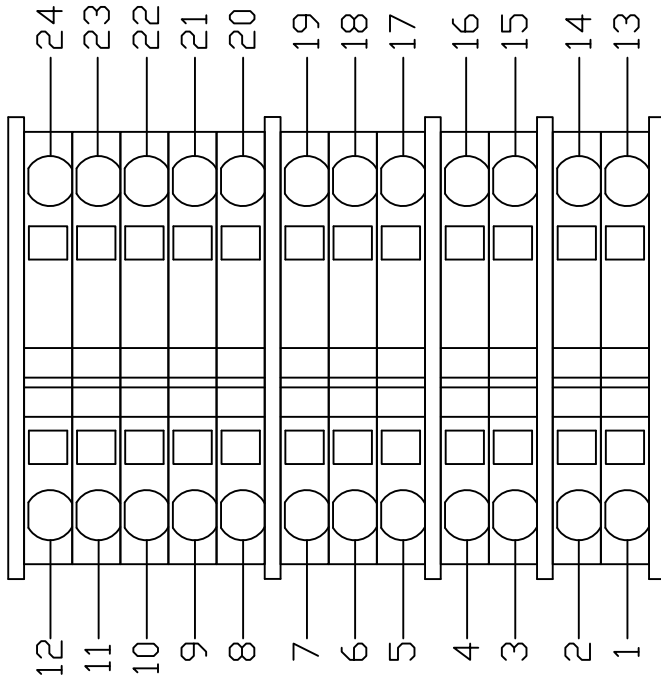
YELLOW

# AD021 ANALOG ADD ON UNIT



MATERIAL NA		KEGEL	
DRAWN BY SLS		DESCRIPTION ANALOG WIRING SCHEMATIC	
DATE 07/20/15		DO NOT SCALE DRAWING	
APPROVED: MP		SIZE C	
REV DATE		QTY/MACHINE PART NUMBER	
SCALE N/A		FLEX WALKER 2016	
SHEET 5		OF 27	

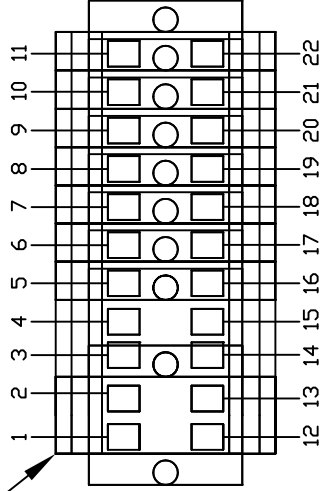
# TB1 <MAIN>



# TB2

<10-PIN SIDE>

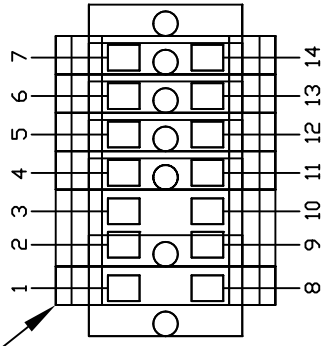
ORANGE  
BLOCK



# TB3

<7-PIN SIDE>

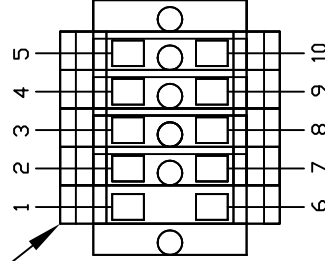
ORANGE  
BLOCK



# TB4

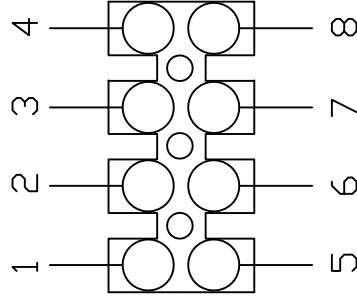
<OIL PLATE>

ORANGE  
BLOCK



# TB5

<TOP PLC PLATE>



## LEGEND

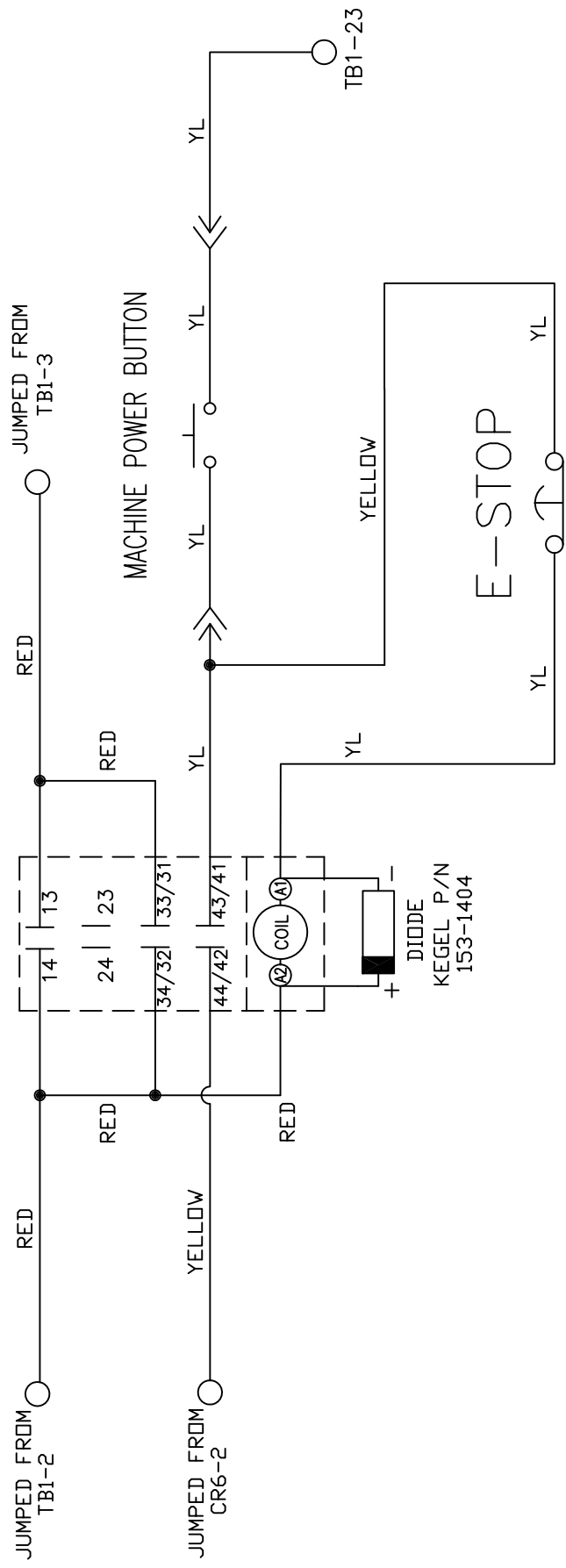
- TB1 - TERMINAL BLOCK 1 <MAIN>
- TB2 - TERMINAL BLOCK 2 <10-PIN SIDE>
- TB3 - TERMINAL BLOCK 3 <7-PIN SIDE>
- TB4 - TERMINAL BLOCK 4 <OIL PLATE>
- TB5 - TERMINAL BLOCK 5 <TOP PLC PLATE>

MATERIAL NA		KEGEL		1961 LONGLEAF BLVD. LAKE WALKER, FL 33669 (863) 734-0200	
DRAWN BY SLS		DATE 07/20/15		DESCRIPTION TERMINAL BLOCK LAYOUT	
APPROVED: MP		REV DATE		DO NOT SCALE DRAWING SIZE QTY/MACHINE PART NUMBER	
ISSUE REV		SCALE N/A		FLEX WALKER 2016	
				SECRET 6 OF 27	

4 3 2 1

D C B A

POWER RELAY  
CR20



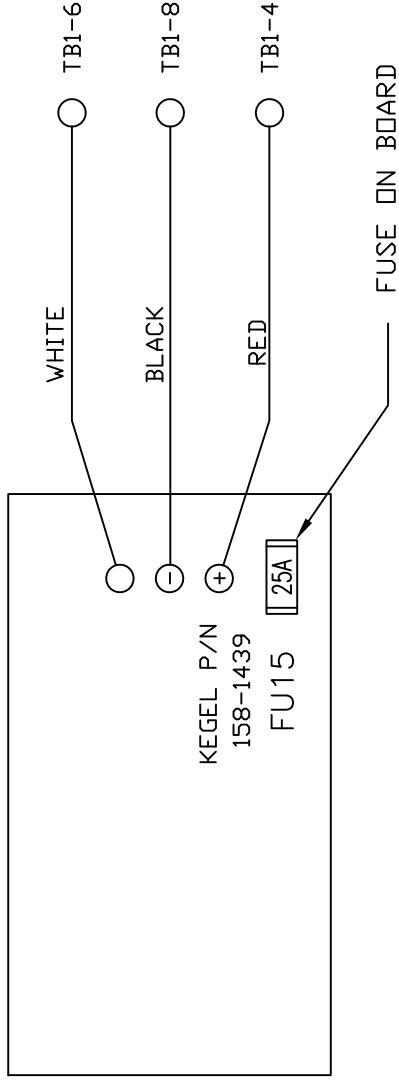
MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 734-0200	
N/A		DESCRIPTION		POWER RELAY WIRING	
DRAWN BY	DATE	DO NOT SCALE DRAWING		SIZE	QTY/MACHINE PART NUMBER
SLS	07/20/15			A	N/A
APPROVED:	REV DATE			SCALE	N/A
MP				SHEET	7 OF 27
DWG REV					

4 3 2 1

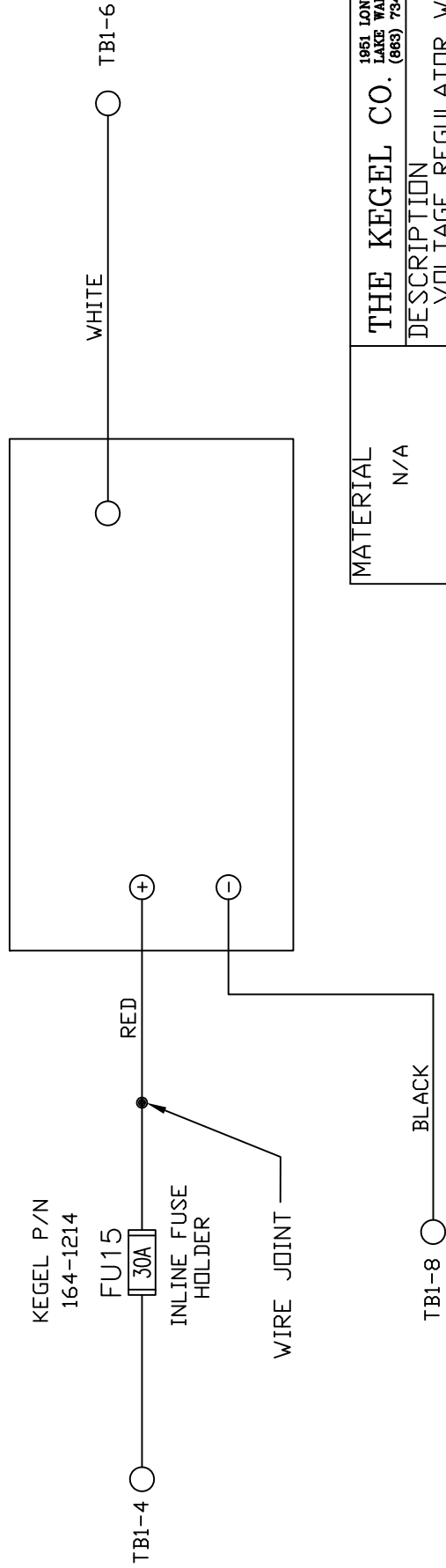


4 3 2 1

# VOLTAGE REGULATOR



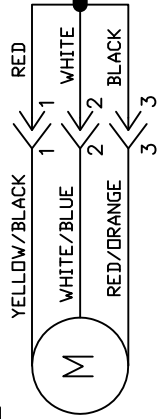
# UPGRADED VOLTAGE REGULATOR



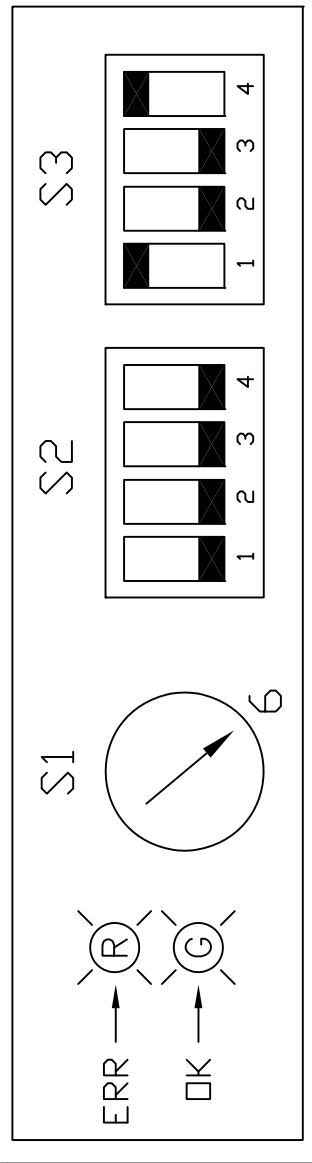
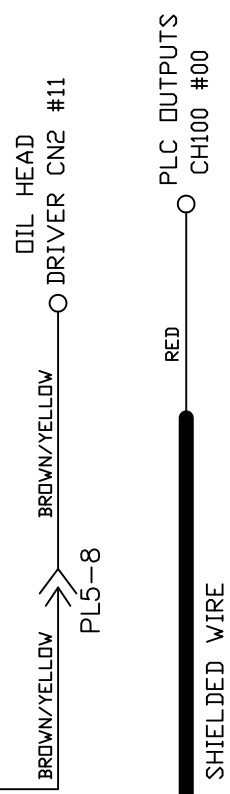
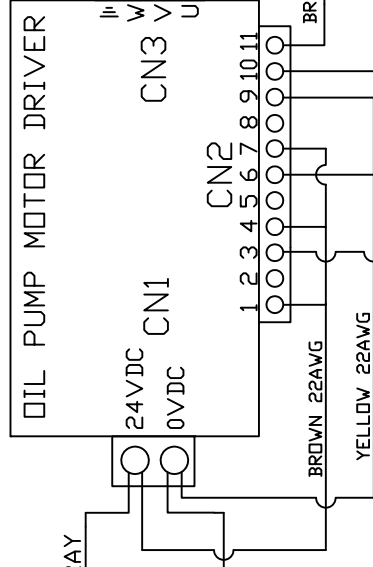
MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		THE KEGEL CO. (888) 734-0200	
DRAWN BY	DATE	DESCRIPTION	
SLS	07/21/15	VOLTAGE REGULATOR WIRING	
APPROVED:	REV DATE	DO NOT SCALE DRAWING	
MP		SIZE	QTY/MACHINE PART NUMBER
		A	N/A FLEX WALKER 2016
DWG REV		SCALE	N/A SHEET 8 OF 27

4 3 2 1

# OIL PUMP MOTOR



KEGEL P/N  
154-1266



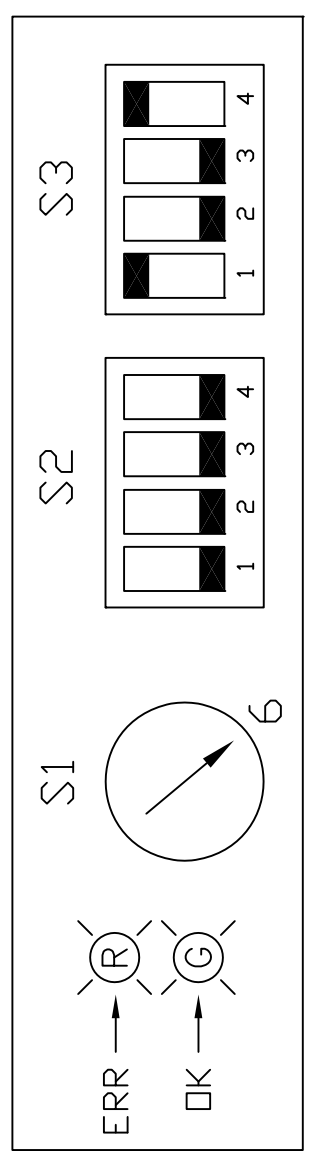
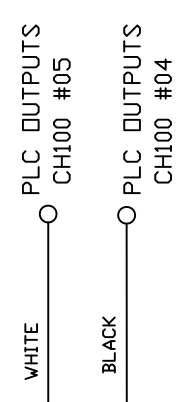
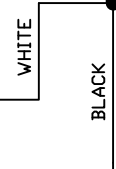
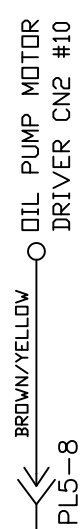
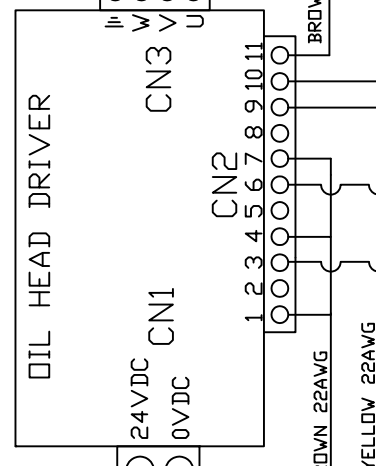
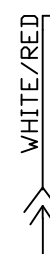
MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		DESCRIPTION		OIL PUMP DRIVER & MOTOR WIRING	
DRAWN BY	DATE	DO NOT SCALE DRAWING		SIZE	QTY/MACHINE PART NUMBER
SLS	07/21/15			A	N/A
APPROVED:	REV DATE			SCALE	N/A
MP				SHEET	9 OF 27
DOC					
REV					

4 3 2 1

D C B A

4 3 2 1

# OIL HEAD MOTOR

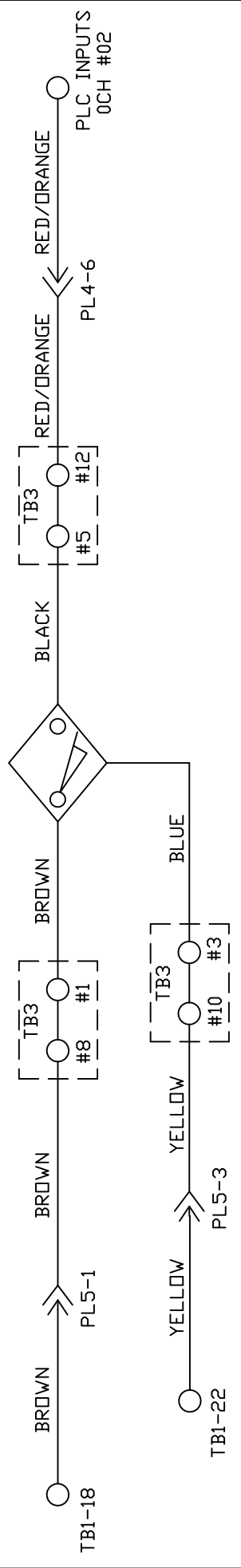


MATERIAL N/A		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (889) 734-0200	
DRAWN BY SLS	DATE 07/21/15	DESCRIPTION OIL HEAD DRIVER & MOTOR WIRING	
APPROVED: MP	REV DATE	DO NOT SCALE DRAWING SIZE QTY/MACHINE PART NUMBER	
DOC REV	MP	A N/A	FLEX WALKER 2016
		SCALE N/A	SHEET 10 OF 27

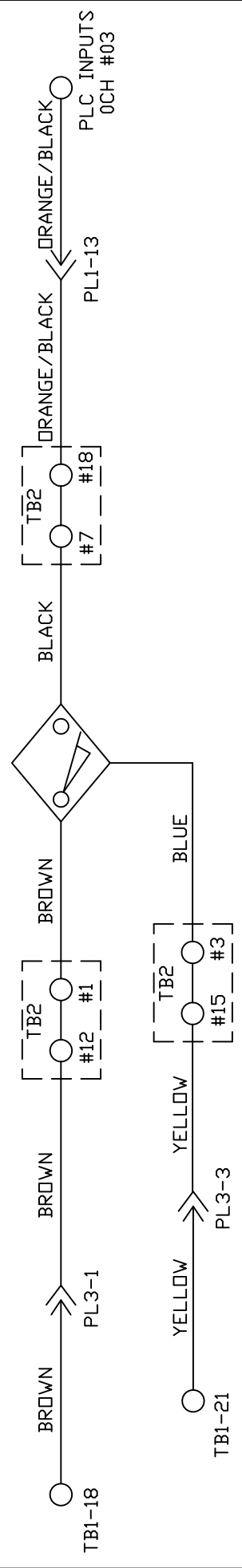
1 2 3 4

4 3 2 1

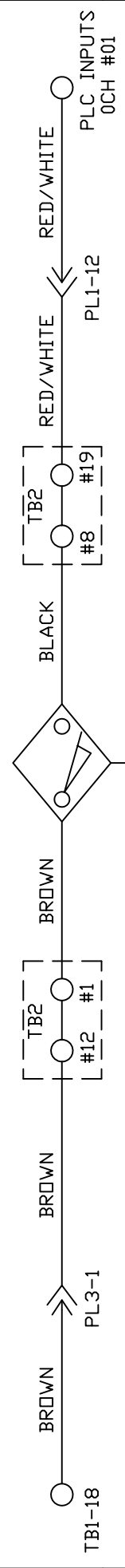
### L-R HEAD PROX



### R-L HEAD PROX

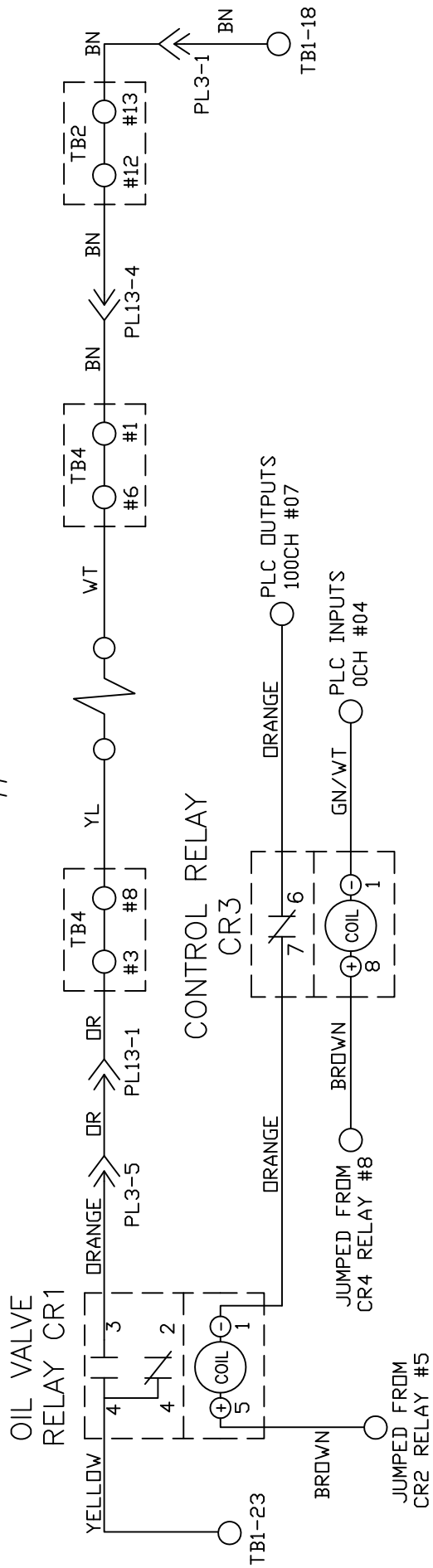


### BOARD PROX

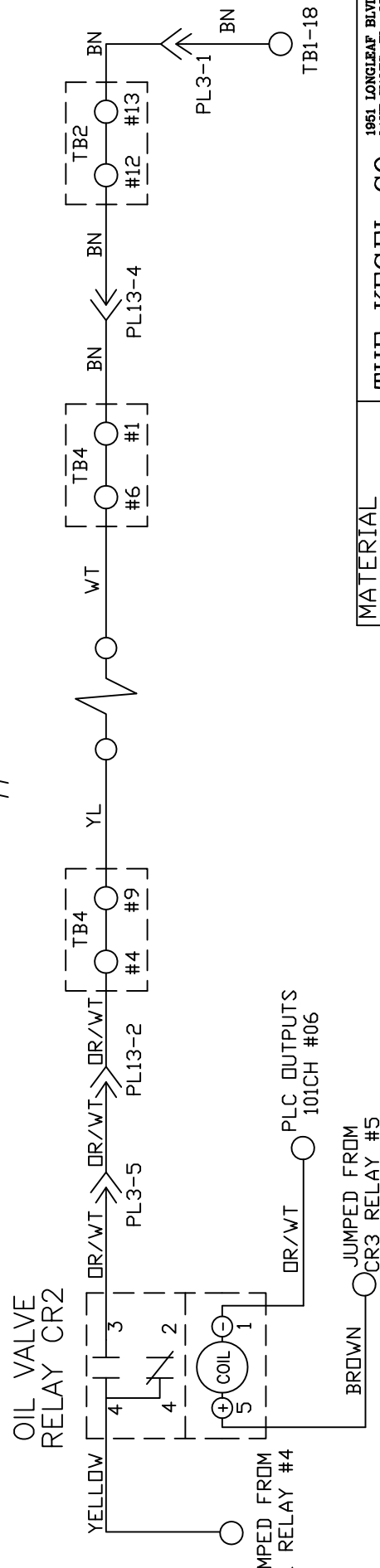


MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33609	
N/A		THE KEGEL CO. (888) 734-0200	
DESCRIPTION			
L-R, R-L & BOARD PROX WIRING			
DO NOT SCALE DRAWING		DO NOT SCALE DRAWING	
SIZE	QTY/MACHINE	PART NUMBER	
A	N/A	FLEX WALKER 2016	
DOC	SCALE	N/A	SHEET 11 OF 27
REV			

# OIL VALVE #1 -- TANK A



# OIL VALVE #2 -- TANK B



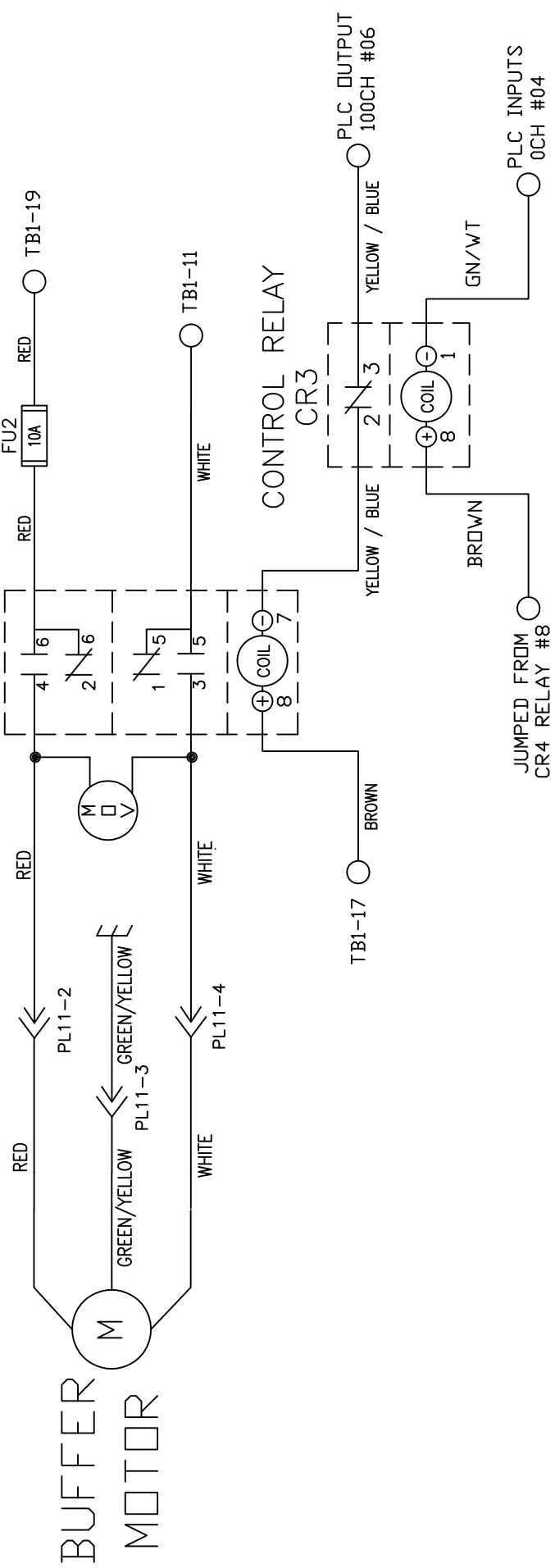
MATERIAL		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
DESCRIPTION		OIL VALVES RELAY WIRING	
DRAWN BY	DATE	DO NOT SCALE DRAWING	
SLS	07/21/15	SIZE	QTY/MACHINE PART NUMBER
APPROVED:	REV DATE	A	N/A
MP		SCALE	N/A
DWG REV		SHEET	12 OF 27

4 3 2 1

D C B A

BUFFER MOTOR RELAY CR13

KEGEL P/N  
154-1273



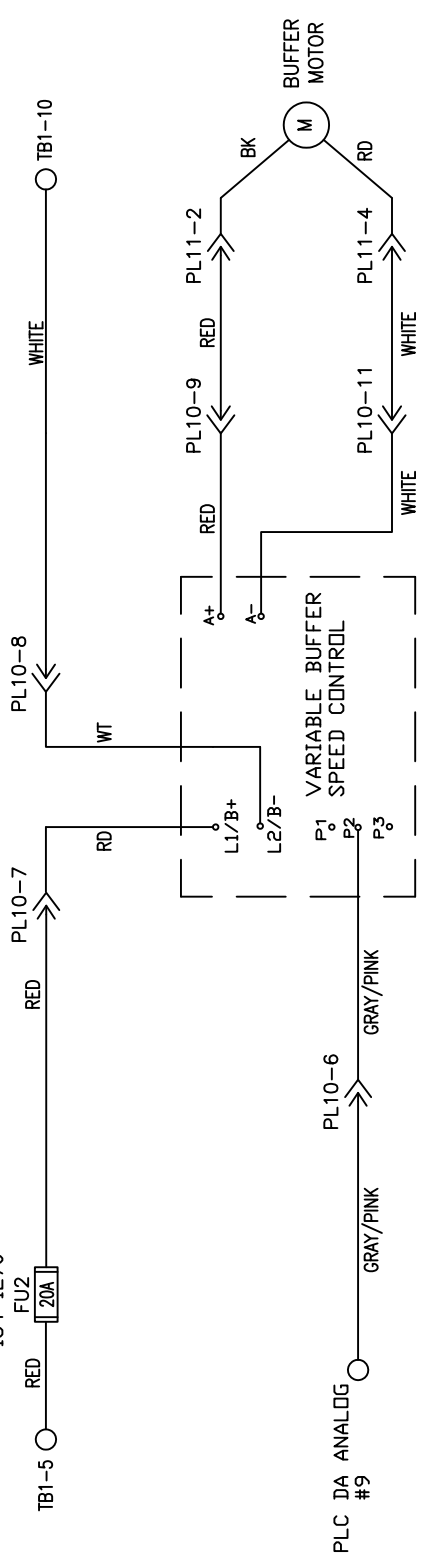
BUFFER MOTOR

MATERIAL	N/A		
DRAWN BY	SLS	DATE	07/21/15
APPROVED:	MP	REV DATE	
DOC REV			
THE KEGEL CO.	1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 734-0200		
DESCRIPTION	BUFFER MOTOR WIRING		
DO NOT SCALE DRAWING			
SIZE	QTY/MACHINE	PART NUMBER	
A	N/A	FLEX WALKER	2016
SCALE	N/A	SHEET	13 OF 27

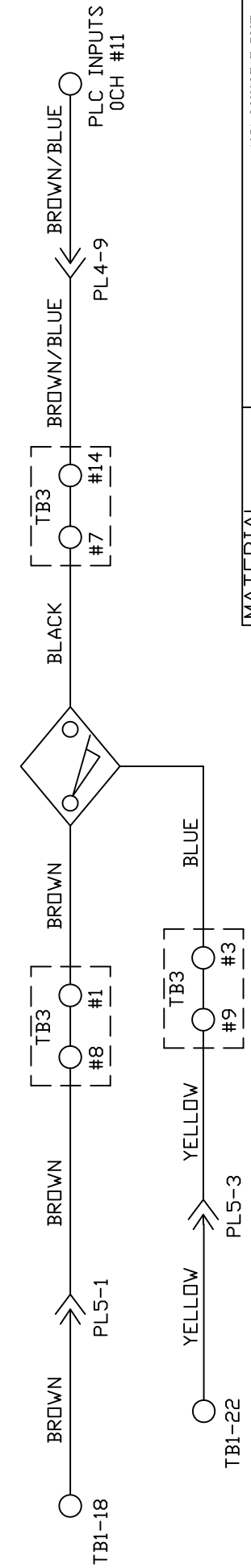
4 3 2 1

1 2 3 4

KEGEL P/N  
154-1270  
FU2  
20A



### VARIABLE BUFFER PROX



MATERIAL N/A		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
DRAWN BY SLS		DESCRIPTION VARIABLE BUFFER MOTOR & TACH WIRING DO NOT SCALE DRAWING	
DATE 07/21/15		SIZE A	PART NUMBER N/A
APPROVED: MP		SCALE N/A	REV 14
DOC REV		SHEET 14 OF 27	

2 3 4

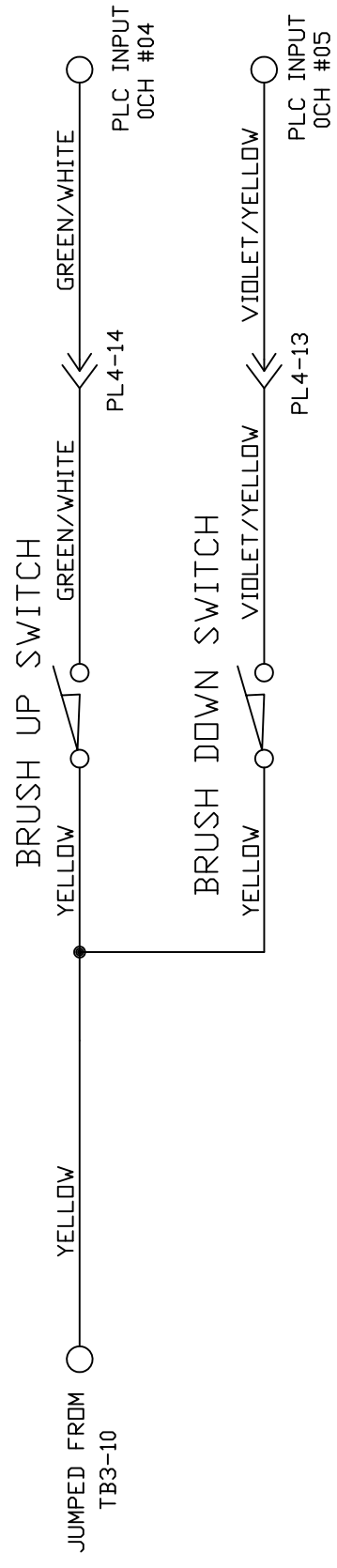
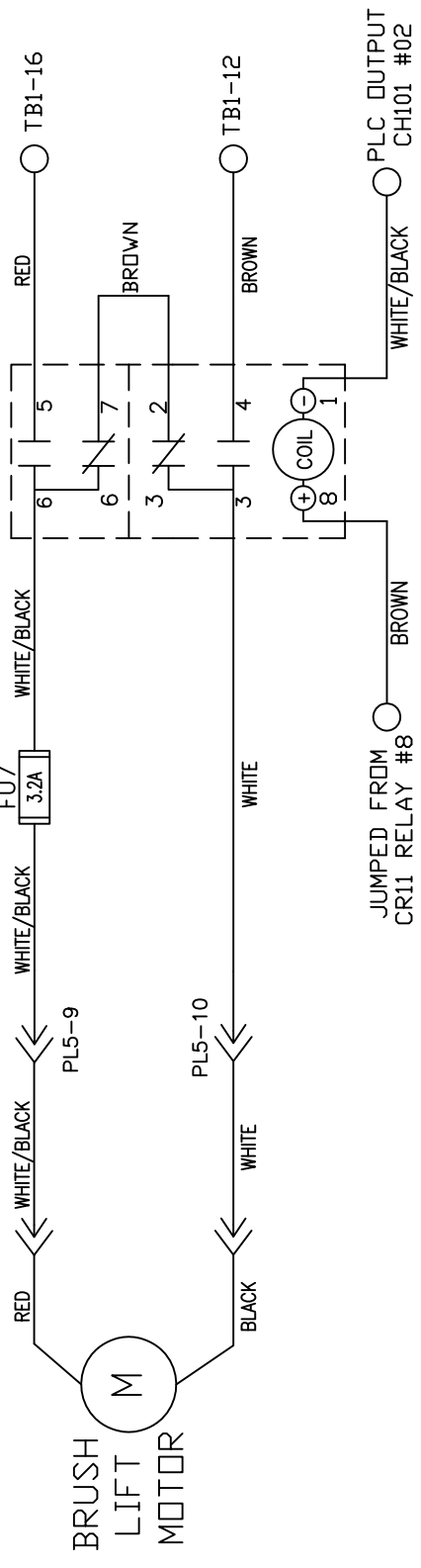
1 2 3 4

4 3 2 1

D C B A

BRUSH LIFT MOTOR RELAY CR10

KEGEL P/N 154-1267  
FU7 3.2A



MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 734-0200	
N/A		DESCRIPTION		BRUSH LIFT MOTOR & SWITCH WIRING DO NOT SCALE DRAWING	
DRAWN BY	DATE	SIZE	QTY/MACHINE	PART NUMBER	
SLS	07/21/15	A	N/A	FLEX WALKER	2016
APPROVED:	REV DATE	SCALE	N/A	SHEET	15 OF 27
MP					
DOC					
REV					

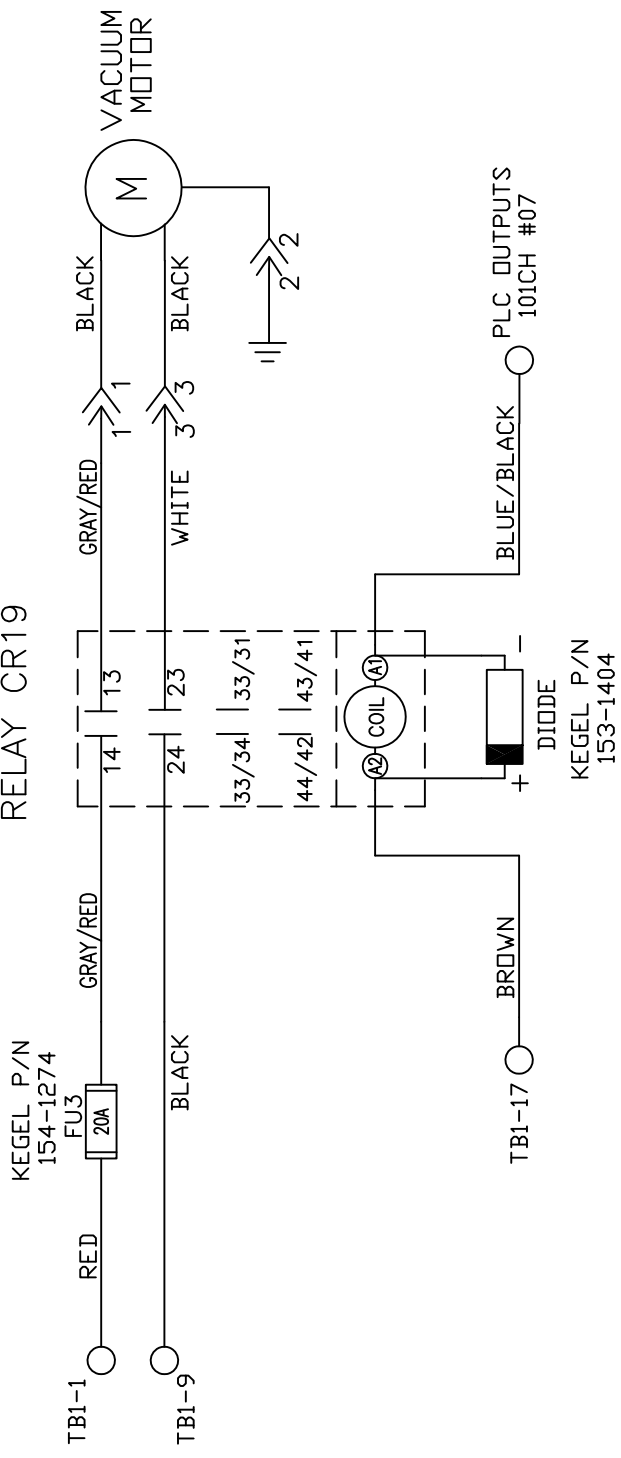
4 3 2 1



4 3 2 1

D C B A

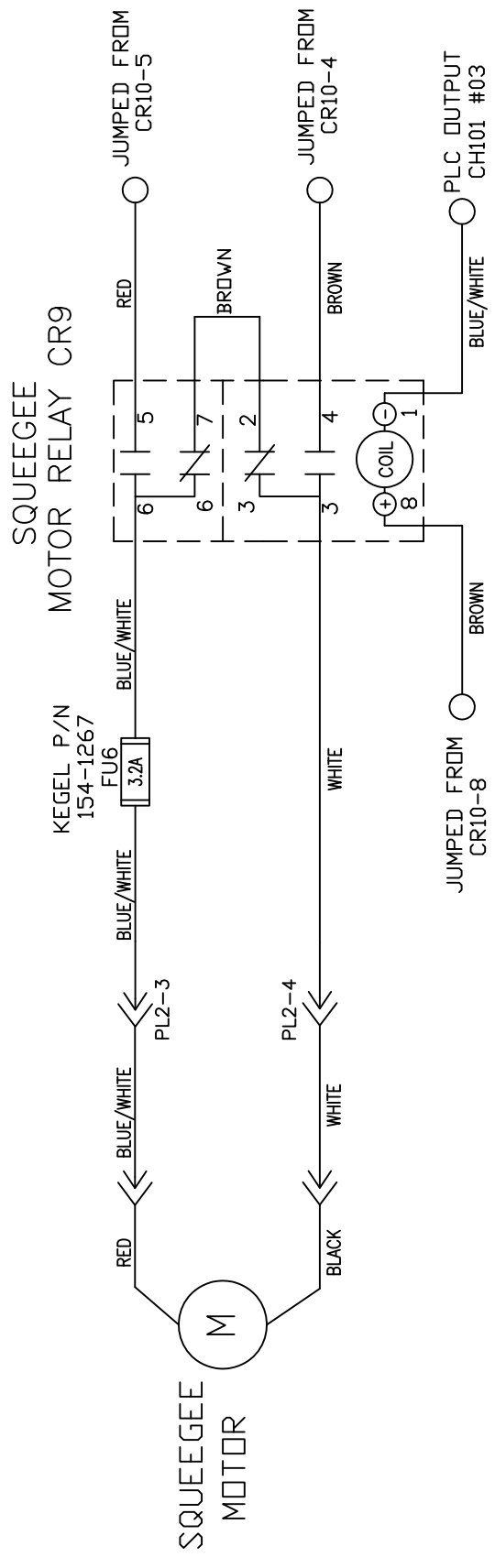
VACUUM MOTOR  
RELAY CR19



MATERIAL		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33859 (888) 734-0200	
N/A		DESCRIPTION VACUUM MOTOR WIRING	
DRAWN BY	DATE	DO NOT SCALE DRAWING	SIZE
SLS	07/21/15	QTY/MACHINE PART NUMBER	A
APPROVED:	REV DATE	A	N/A
MP		SCALE	N/A
DOC REV		SHEET	16 OF 27

4 3 2 1

4 3 2 1



MATERIAL		THE KEGEL CO. (669) 734-0200	
N/A		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
DESCRIPTION	SQUEEGEE MOTOR & SWITCH WIRING		
DO NOT SCALE DRAWING	DO NOT SCALE DRAWING		
DATE	07/21/15	SIZE	A
REV DATE		QTY/MACHINE	N/A
MP		SCALE	N/A
DOC REV		SHEET	17 OF 27

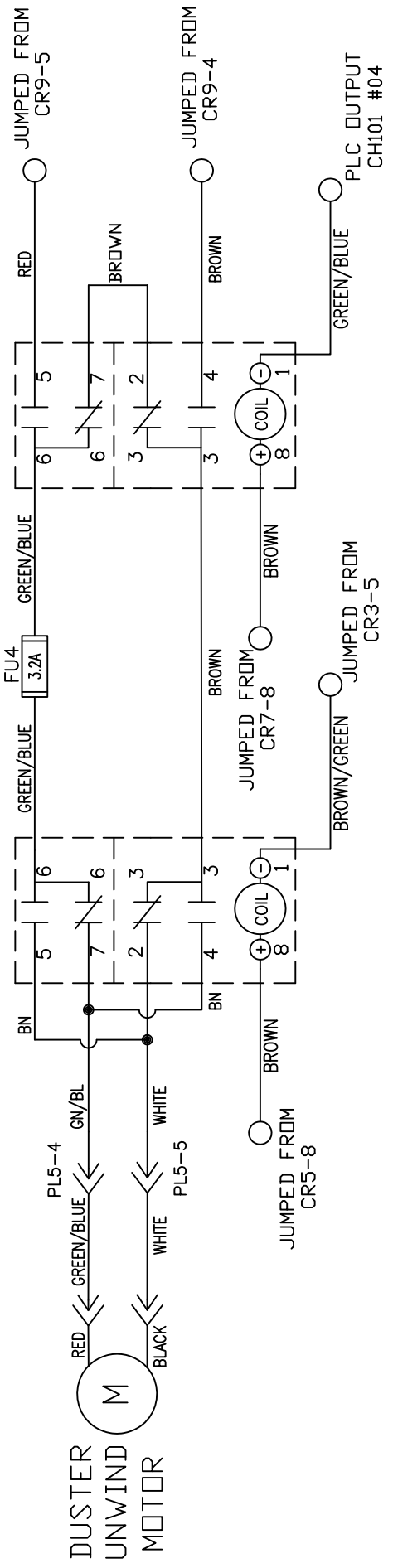
4 3 2 1

1 2 3 4

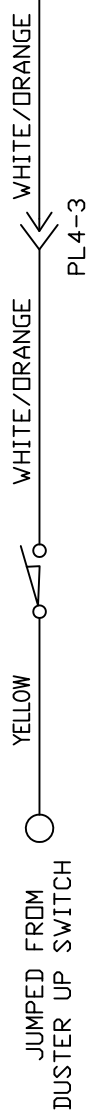
DUSTER UNWIND MOTOR RELAY CR8

DUSTER POLARITY RELAY CR4

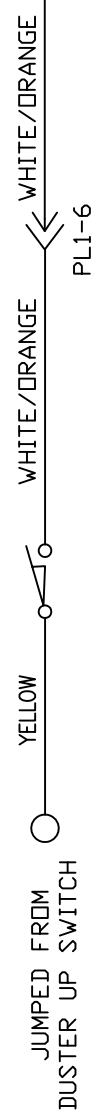
KEGEL P/N  
154-1267  
FU4  
3.2A



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 DO NOT SCALE DRAWING	
DRAWN BY	DATE	SIZE	QTY/MACHINE	PART NUMBER	
SLS	07/21/15	A	N/A	FLEX WALKER	2016
APPROVED:	REV DATE	SCALE	N/A	SHEET	18 OF 27
MP					
DOC REV					

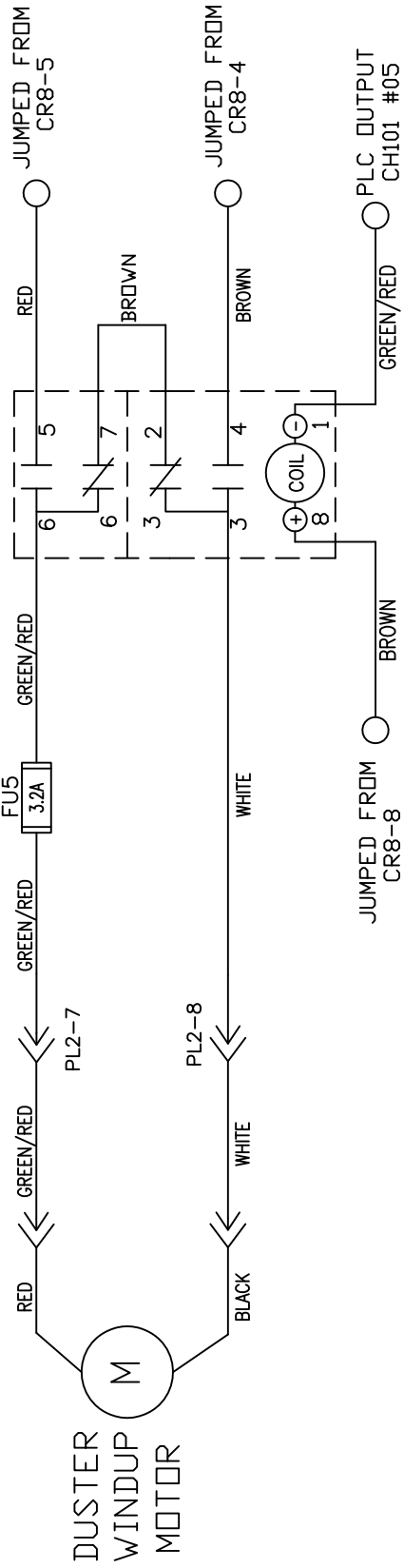
3 2 1

4 3 2 1

4 3 2 1

DUSTER WINDUP  
MOTOR RELAY CR7

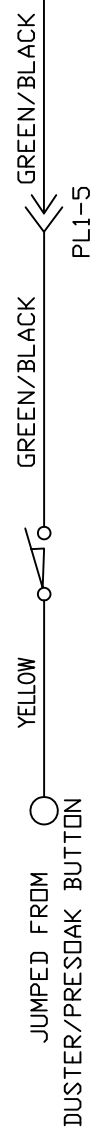
KEGEL P/N  
154-1267  
FU5  
3.2A



7-PIN SIDE  
DUSTER UP SWITCH



10-PIN SIDE  
DUSTER UP SWITCH



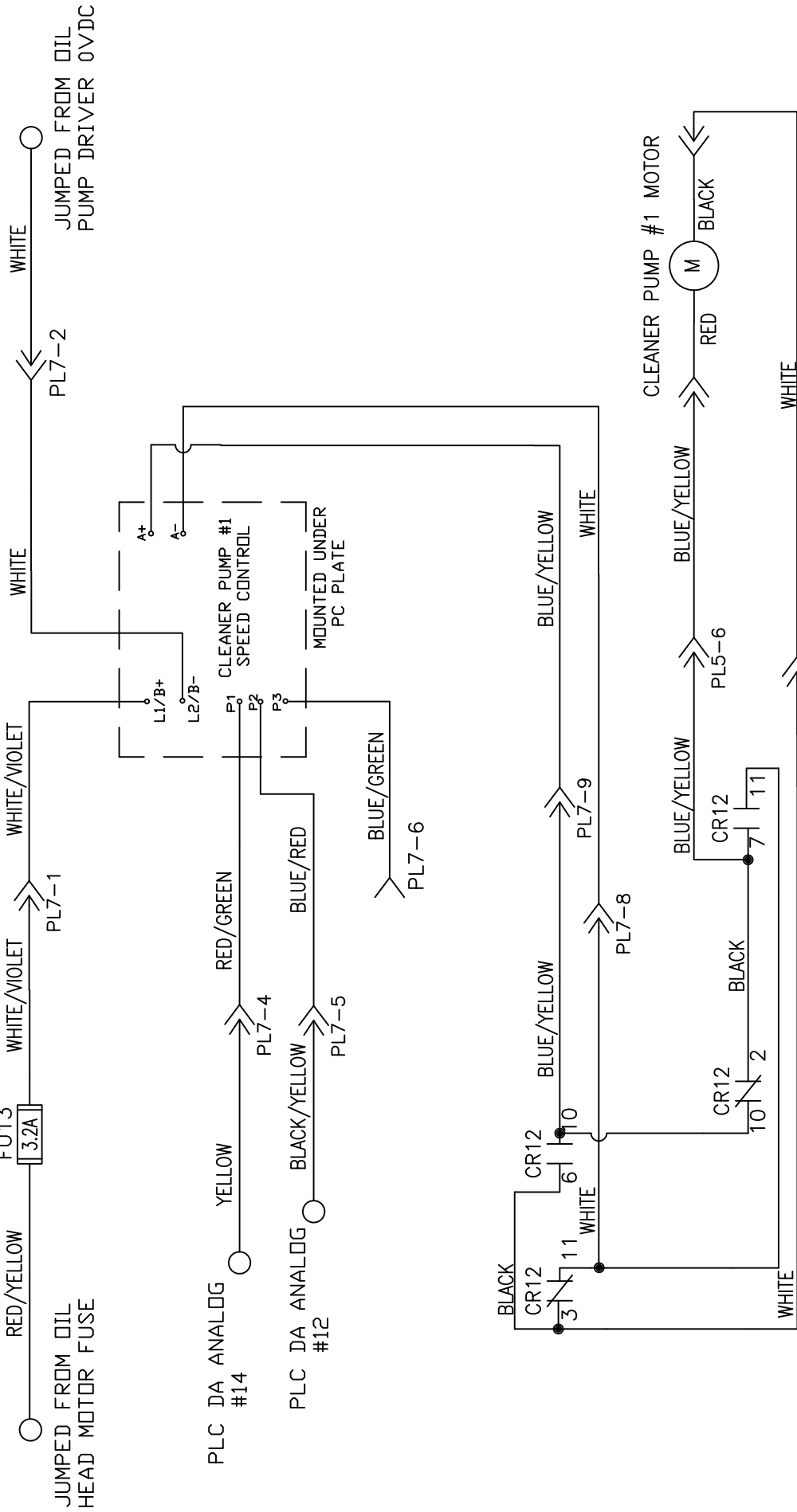
MATERIAL		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		DESCRIPTION	
DRAWN BY SLS		DUSTER WINDUP & SWITCH WIRING	
DATE 07/21/15		DO NOT SCALE DRAWING	
APPROVED: MP		SIZE	QTY/MACHINE PART NUMBER
		A	N/A
DOC REV		SCALE	N/A
			SHEET 19 OF 27

4 3 2 1

4 3 2 1

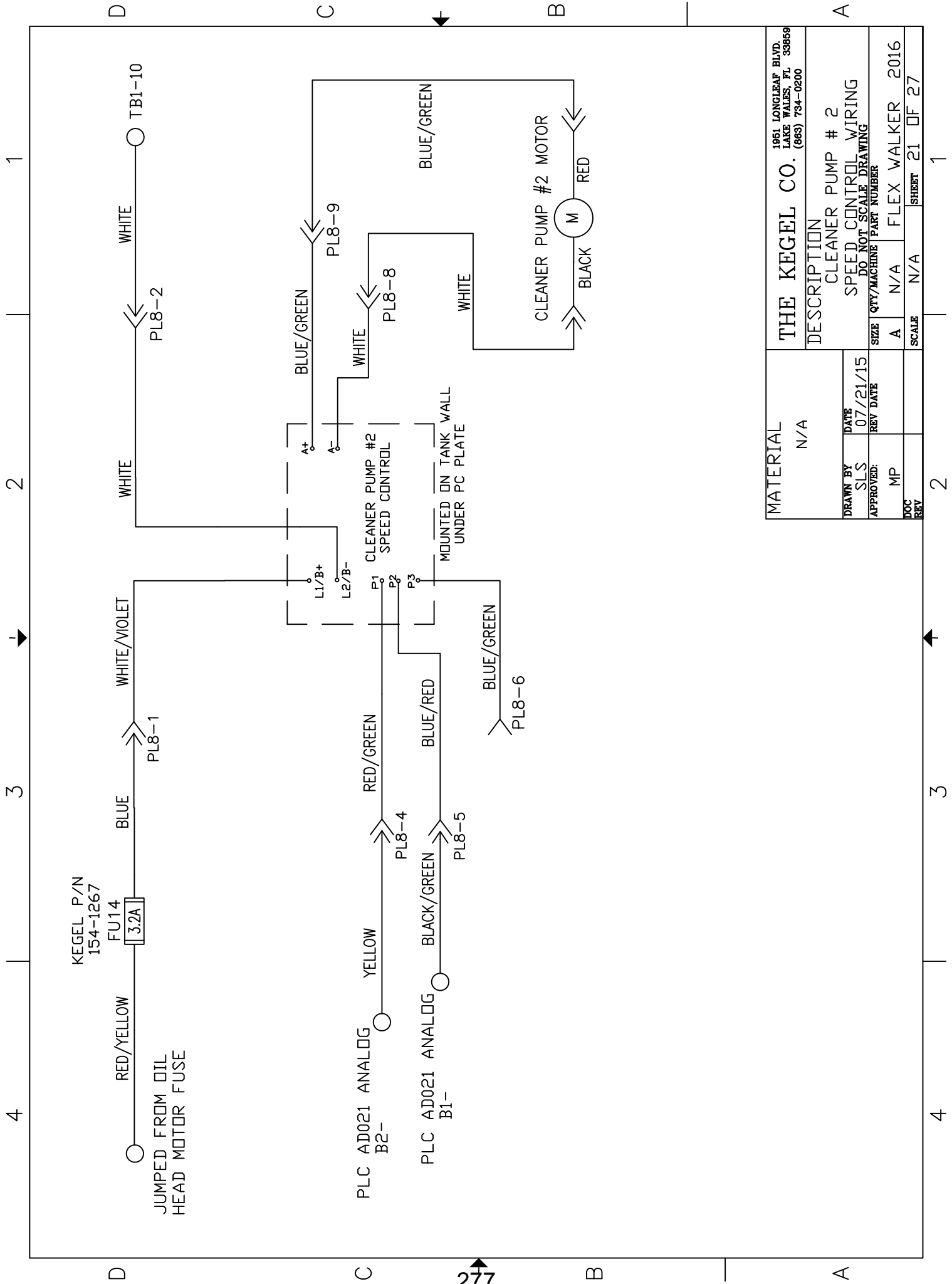
KEGEL P/N  
154-1267

FU13  
3.2A



MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		THE KEGEL CO. (888) 734-0200	
DRAWN BY	DATE	DESCRIPTION	
SLS	07/21/15	CLEANER PUMP # 1	
APPROVED:	REV DATE	SPEED CONTROL WIRING	
MP		DO NOT SCALE DRAWING	
DOC	REV	SIZE	QTY/MACHINE PART NUMBER
		A	N/A
		SCALE	N/A
		SHEET	20 OF 27

4 3 2 1



KEGEL P/N  
154-1267

FU14  
3.2A

JUMPED FROM OIL  
HEAD MOTOR FUSE

PLC AD021 ANALOG  
B2-

PLC AD021 ANALOG  
B1-

RED/GREEN

BLUE/RED

BLUE/GREEN

CLEANER PUMP #2  
SPEED CONTROL

MOUNTED ON TANK WALL  
UNDER PC PLATE

CLEANER PUMP #2 MOTOR

MATERIAL	N/A	
DESCRIPTION	CLEANER PUMP # 2 SPEED CONTROL WIRING DO NOT SCALE DRAWING	
DRAWN BY	DATE	07/21/15
APPROVED:	REV DATE	
MP	MP	
DOC	SCALE	N/A
REV	SHEET	21 OF 27

THE KEGEL CO.  
1951 LONGLEAF BLVD.  
LAKE WALES, FL 33869  
(888) 734-0200

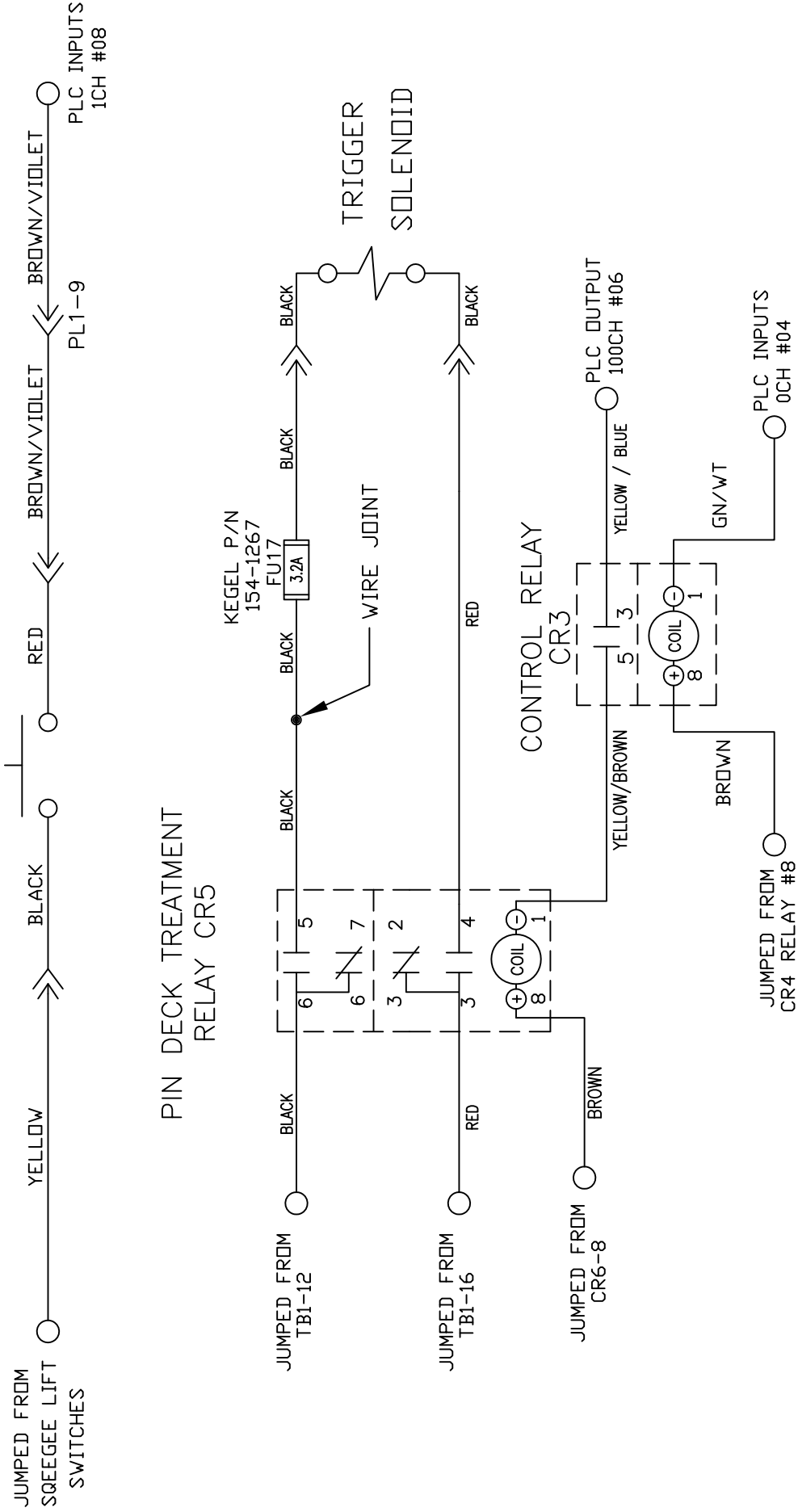
1951 LONGLEAF BLVD.  
LAKE WALES, FL 33869  
(888) 734-0200

CLEANER PUMP # 2  
SPEED CONTROL WIRING  
DO NOT SCALE DRAWING

SIZE QTY/MACHINE PART NUMBER

A N/A FLEX WALKER 2016  
SCALE N/A SHEET 21 OF 27

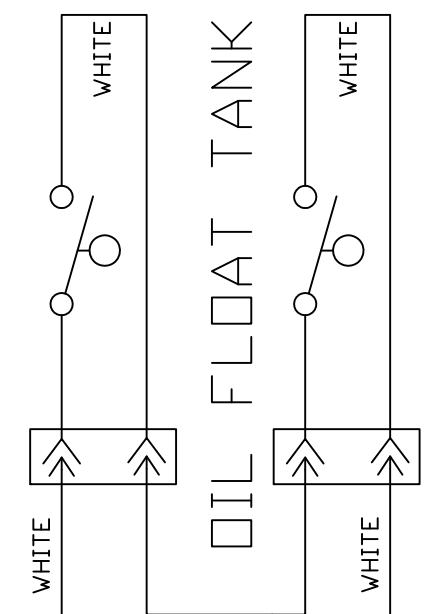
# DUSTER/PRESOAK BUTTON



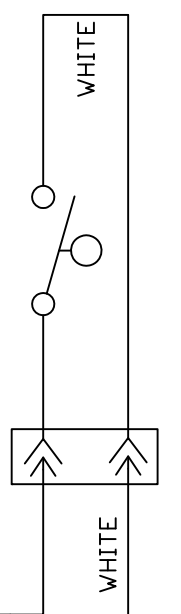
MATERIAL		THE KEGEL CO. (669) 734-0200	
N/A		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
DRAWN BY	DATE	DESCRIPTION	
SLS	07/21/15	DUSTER/PRESOAK BUTTON	
APPROVED:	REV DATE	& TRIGGER SOLENOID	
MP		SIZE	DO NOT SCALE DRAWING
		QTY/MACHINE	PART NUMBER
		A	N/A
DOC	SCALE	N/A	N/A
REV			
			SHEET 22 OF 27

4 3 2 1

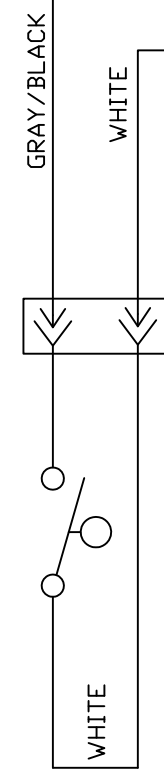
# OIL FLOAT TANK A



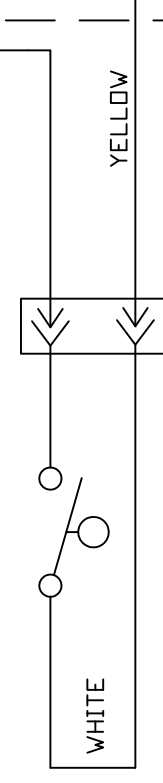
# OIL FLOAT TANK B



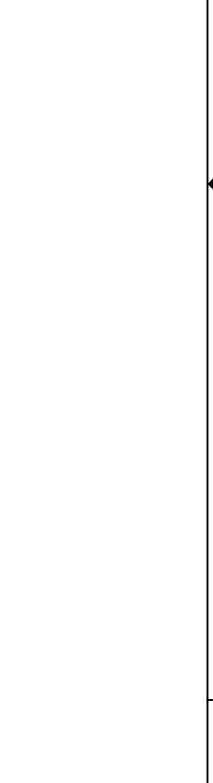
# CLEANER FLOAT PUMP #1



# CLEANER FLOAT PUMP #2



# OPTIONAL CLEANER UPGRADE



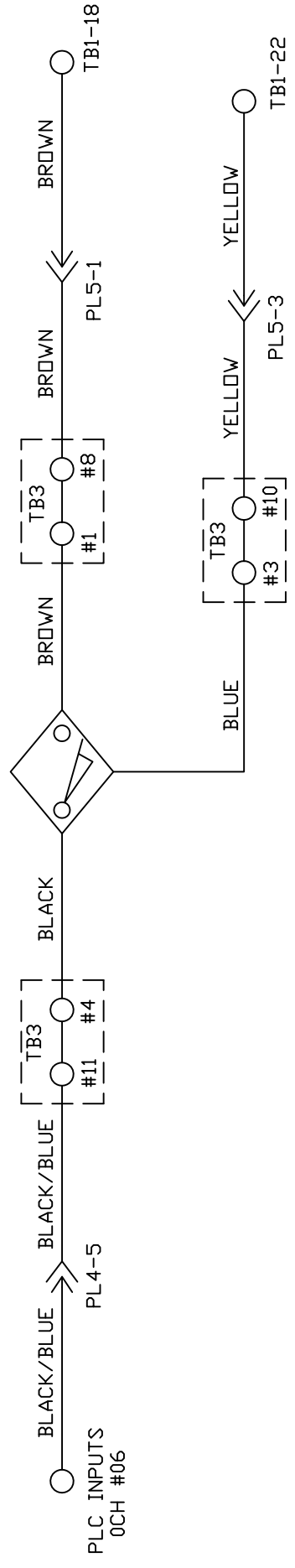
MATERIAL N/A		THE KEGEL CO. 1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
DESCRIPTION OIL FLOATS & CLEANER FLOATS WIRING DO NOT SCALE DRAWING		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
DRAWN BY SLS	DATE 07/21/15	SIZE A	QTY/MACHINE N/A
APPROVED: MP	REV DATE	SCALE N/A	PART NUMBER N/A
DOC REV			2016
			FLEX WALKER
			23 OF 27

4 3 2 1

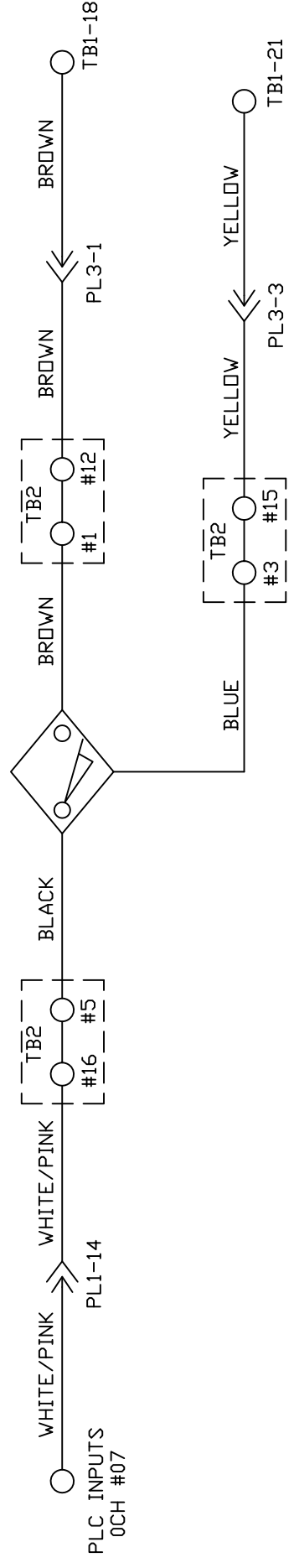


4 3 2 1

# SPEED TACH PROX



# LANE DISTANCE PROX



MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		THE KEGEL CO. (888) 734-0200	
DESCRIPTION			
SPEED TACH & LANE DISTANCE WIRING			
DO NOT SCALE DRAWING			
DRAWN BY	DATE	SIZE	QTY/MACHINE PART NUMBER
SLS	07/21/15	A	N/A
APPROVED:	REV DATE	SCALE	N/A
MP			
DOC REV			

4 3 2 1

4 3 2 1

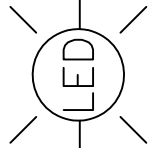
TB1-15

KEGEL P/N  
155-1229  
FUJ16  
1A

PL4-12

RED/GREEN

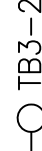
RED/GREEN



YELLOW/WHITE

YELLOW

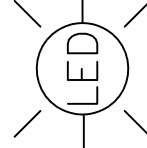
YELLOW



LED TANK  
LIGHT SWITCH

YELLOW

LED ARROW  
LIGHT



RED/GREEN

D

C

B

A

D

C

B

A

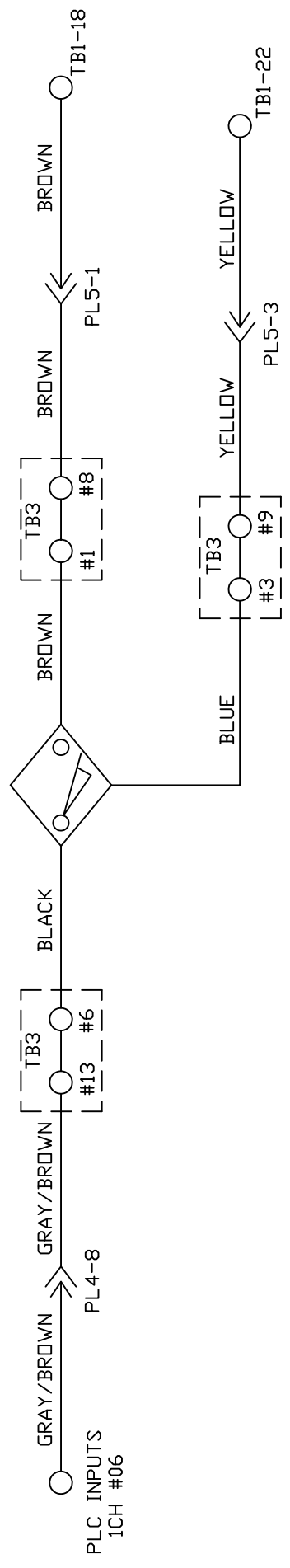
281

MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		LED TANK LIGHT WIRING	
DRAWN BY	DATE	DO NOT SCALE DRAWING	SIZE	QTY/MACHINE	PART NUMBER
SLS	07/21/15		A	N/A	FLEX WALKER 2016
APPROVED:	REV DATE		SCALE	N/A	SHEET 25 OF 27
MP					
DOC					
REV					

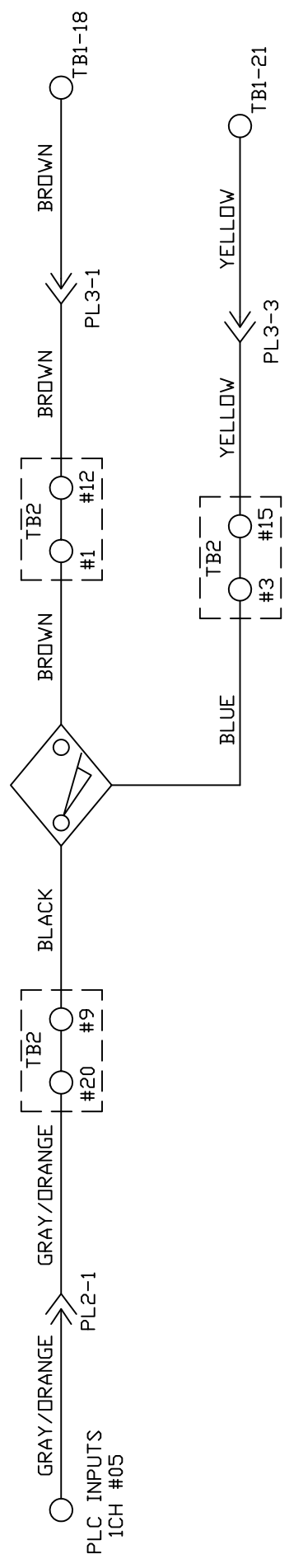
4 3 2 1

4 3 2 1

### ADS PROX 7-PIN SIDE



### ADS PROX 10-PIN SIDE

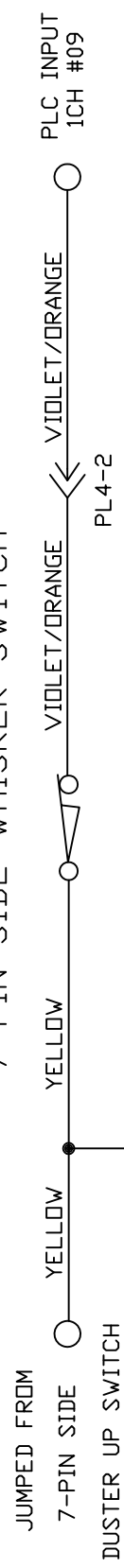


MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33869	
N/A		DESCRIPTION		ADS WIRING	
DRAWN BY	DATE	7-PIN & 10-PIN SIDE		DO NOT SCALE DRAWING	
SLS	07/21/15	SIZE	QTY/MACHINE	PART NUMBER	
APPROVED:	REV DATE	A	N/A	FLEX WALKER	2016
MP		SCALE	N/A	SHEET	26 OF 27
DOC REV					

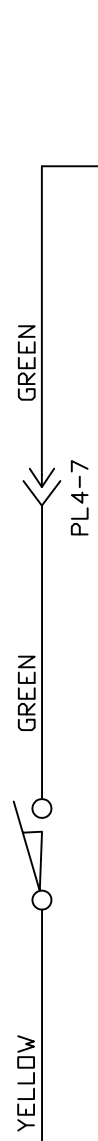
4 3 2 1

4 3 2 1

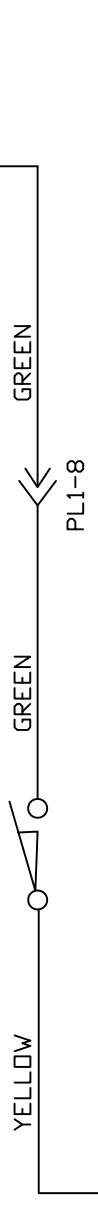
7-PIN SIDE WHISKER SWITCH



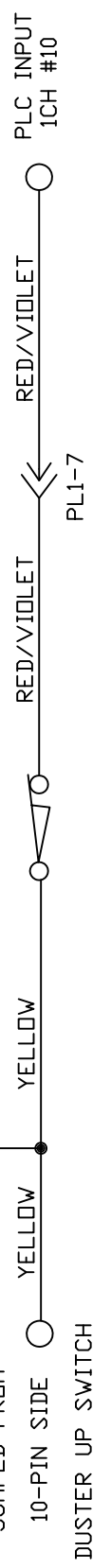
7-PIN SIDE BUMPER SWITCH



10-PIN SIDE BUMPER SWITCH



10-PIN SIDE WHISKER SWITCH



MATERIAL		THE KEGEL CO.		1951 LONGLEAF BLVD. LAKE WALES, FL 33859	
N/A		DESCRIPTION		BUMPER & WHISKER	
DRAWN BY	DATE	DO NOT SCALE DRAWING		SIZE	
SLS	07/21/15	DO NOT SCALE DRAWING		A	
APPROVED:	REV DATE	DO NOT SCALE DRAWING		N/A	
MP		DO NOT SCALE DRAWING		N/A	
DWG	REV	DO NOT SCALE DRAWING		SCALE	
		DO NOT SCALE DRAWING		N/A	
		DO NOT SCALE DRAWING		SHEET 27 OF 27	

4 3 2 1

