

# CHAPTER 8

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# BATTERIES AND CHARGERS

Rev. 12/13



158-1634B – K2 LITHIUM – 44.4 Ah



158-1634C – K2 LITHIUM – 59.2 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

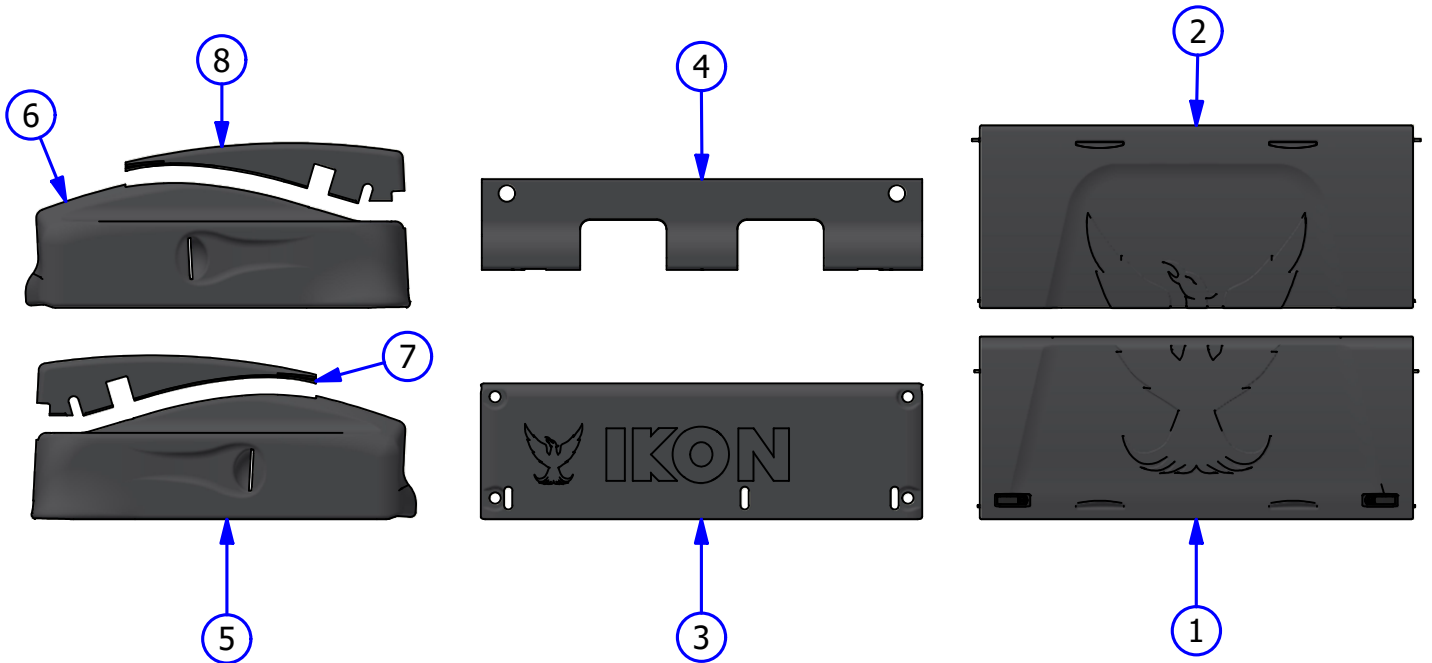
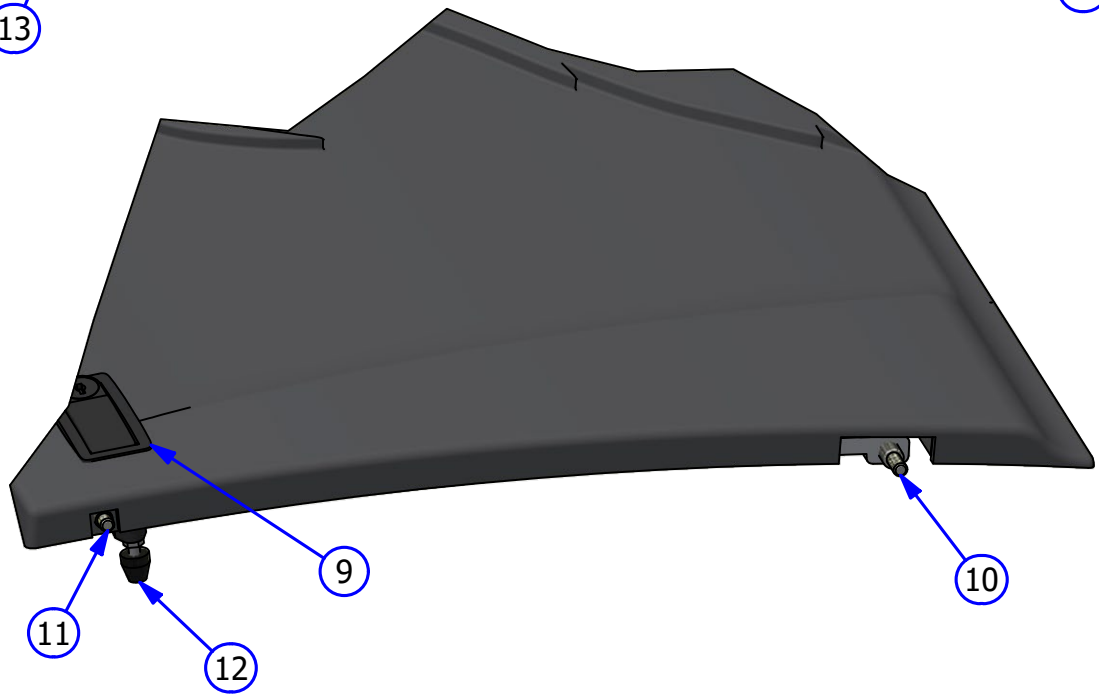
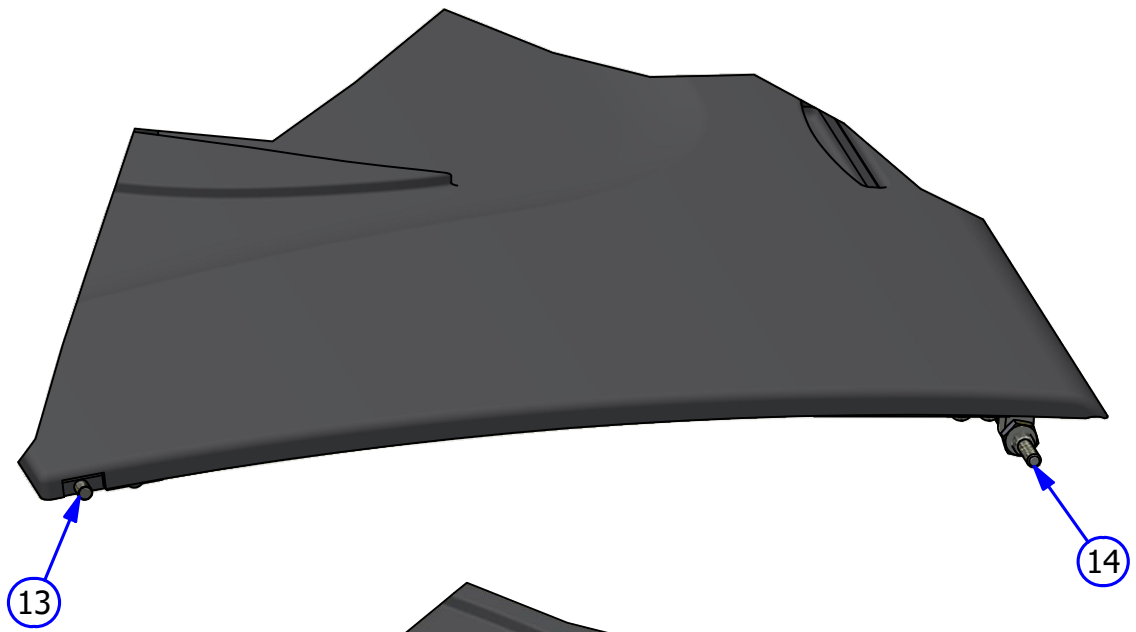
DC Power Cord Assembly – 6FT External – 164-8475

## Lid and Cover Assembly

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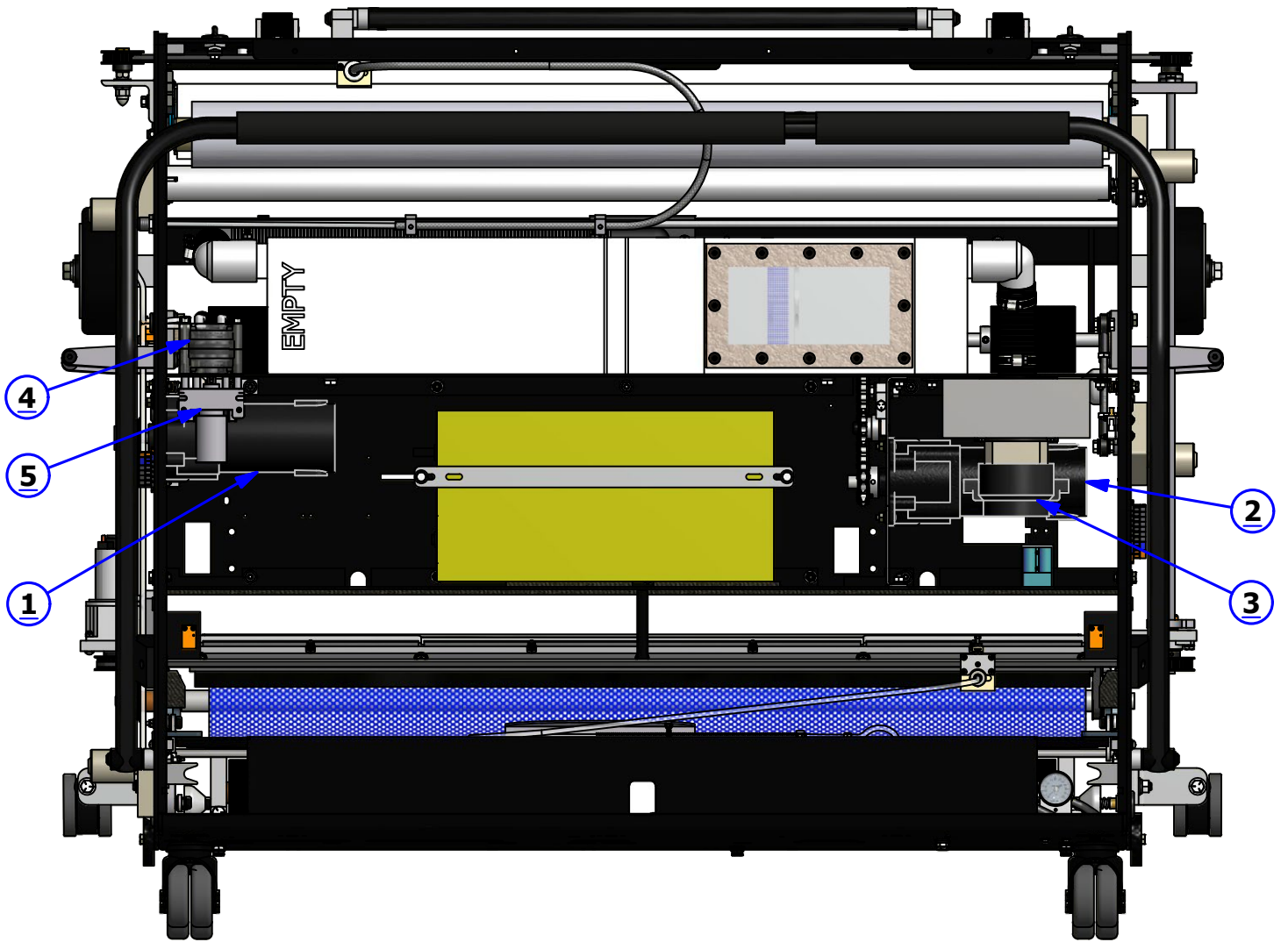
INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	164-8802	SLIDING LID ASSEMBLY - <b>TAIL</b>	EA
2	1	164-8801	SLIDING LID ASSEMBLY - <b>HEAD</b>	EA
3	1	164-8808	REAR PANEL	EA
4	1	164-8804	FRONT BUMPER	EA
5	1	164-8809	IKON <b>RT</b> SIDE GUARD - <b>LOWER</b>	EA
6	1	164-8810	IKON <b>LT</b> SIDE GUARD - <b>LOWER</b>	EA
7	1	164-8811	IKON <b>RT</b> SIDE GUARD - <b>UPPER</b>	EA
8	1	164-8812	IKON <b>LT</b> SIDE GUARD - <b>UPPER</b>	EA
9	2	153-2232L	FLUSH MOUNT LID LATCH ( <b>W/LOCK</b> )	EA
10	2	164-2069	SPRING PLUNGER THREADED - <b>3/8-16</b> THREAD	EA
11	2	164-2002	DETENT - SPRING PLUNGER	EA
12	2	164-6164	LID LATCH BUMPER	EA
13	2	164-6284	HEAD LID REAR PIN - 2021	EA
14	2	164-2069M	SPRING PLUNGER - MODIFIED	EA





**Top View**  
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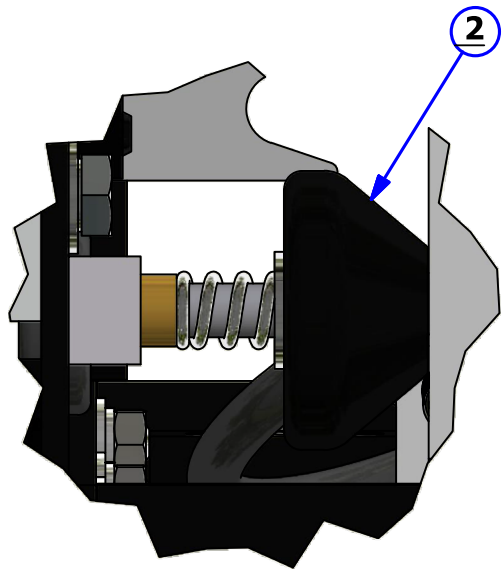
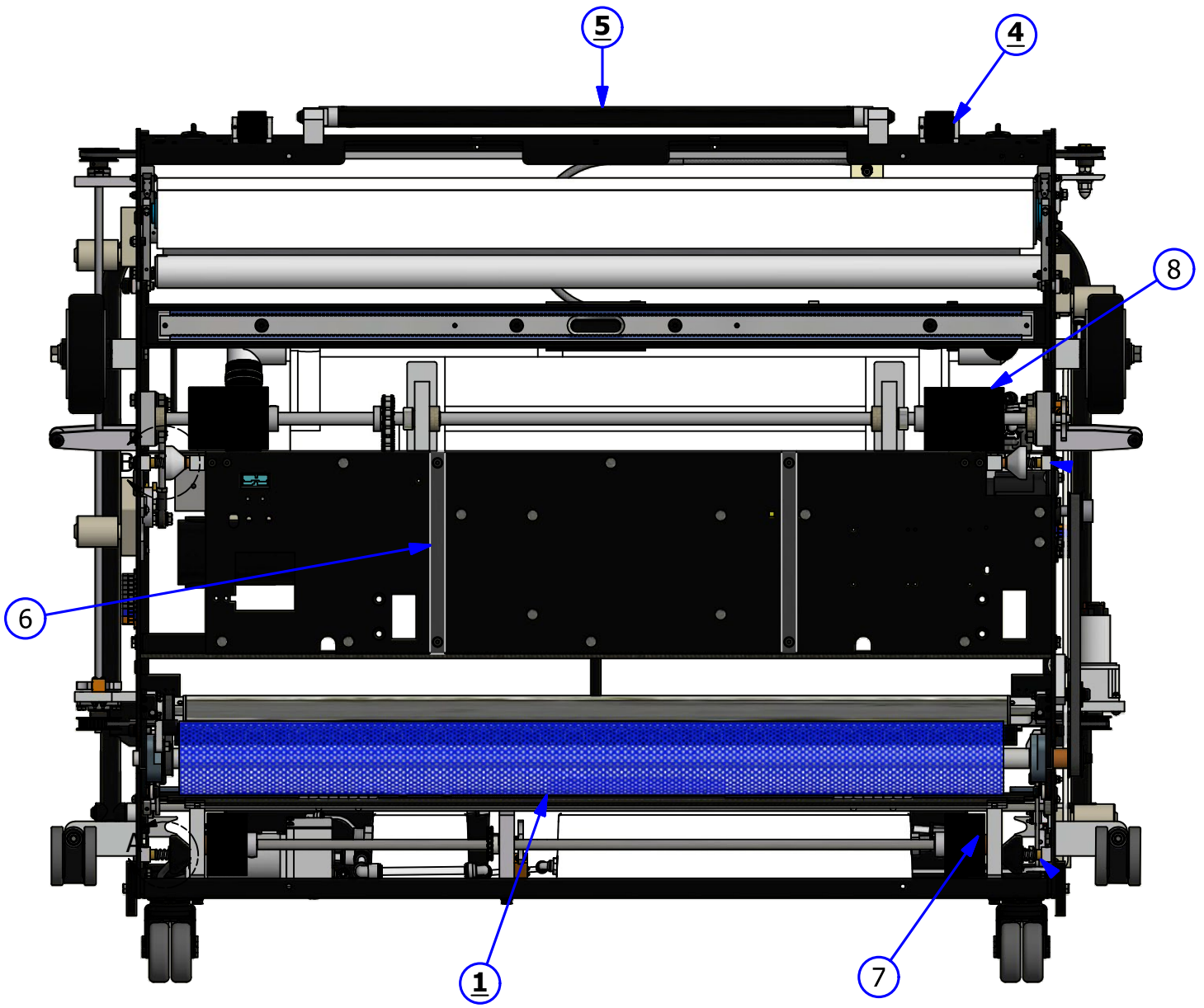
INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	164-8414	BUFFER MOTOR	EA
	1	164-1254	BUFFER MOTOR BRUSHES (PAIR)	PR
	1	164-9019	BUFFER MOTOR BELT - <b>315L050</b>	EA
	1	164-9012	PULLEY - <b>15 TOOTH - 1/2" BORE W/KWY 1/4-20 SET</b>	EA
2	1	164-8602B	DRIVE MOTOR - <b>1.5" SHAFT</b>	EA
	1	164-1246	DRIVE MOTOR BRUSHES (PAIR)	PR
	1	154-9601	CHAIN (FOR <b>153-9002 SPROCKET</b> )	EA
	1	153-9047	MASTER LINK <b>#40</b>	EA
	1	153-9048	OFFSET LINK <b>#40</b>	EA
	1	153-9002	SPROCKET - <b>40B13 (5/8 IN. - 1/4-20 SET)</b>	EA
3	1	158-8407	VACUUM MOTOR - <b>24VDC</b>	EA
		158-1421B	VACUUM MOTOR BRUSHES (PAIR)	PR
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 - <b>24VDC</b>	EA



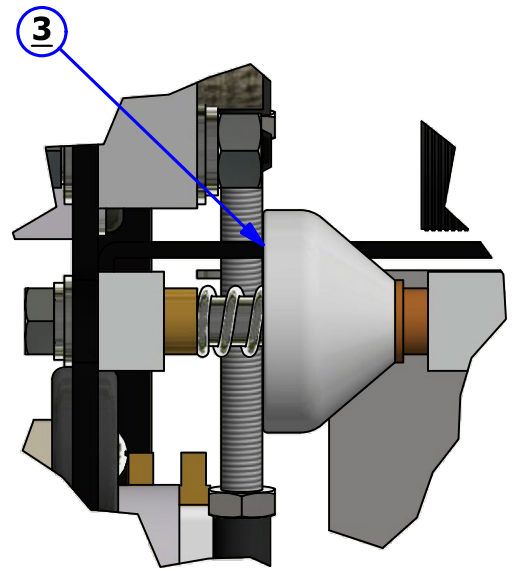
**Bottom View**

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INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	164-8001A	BUFFER BRUSH ASSEMBLY	EA
	1	164-9019	BUFFER MOTOR BELT - <b>315L050</b>	EA
2	2	164-8815	REAR EDGE GUILD WHEEL ASSEMBLY - BLACK	EA
	2	153-2401	SPRING - COMPRESSION FOR GUIDE WHEEL <b>(NOT SHOWN)</b>	EA
	2	153-2407	BOLT FOR GUIDE ROLLER - FRONT <b>(NOT SHOWN)</b>	EA
	2	153-6417	REAR LANE EDGE GUIDE ROLLER MOUNT	EA
3	2	158-8637	FRONT LANE EDGE GUIDE ROLLER ASSEMBLY - WHITE	EA
	2	153-2401	SPRING - COMPRESSION FOR GUIDE WHEEL <b>(NOT SHOWN)</b>	EA
	2	153-2527	SHOULDER BOLT - <b>3/8 X 2-1/4</b> - FOR GUIDE WHEEL - REAR	EA
	2	153-6417	FRONT LANE EDGE GUIDE ROLLER MOUNT	EA
4	2	153-7005R	MOMENTARY WHEEL ASSEMBLY <b>(WHEEL ONLY)</b>	EA
			<b>*THE BELOW ATTACHED PARTS ARE NOT SHOWN</b>	
	2	153-6006	MOMENTARY WHEEL SHAFT	EA
	2	153-6029	MOMENTARY WHEEL HOUSING ASSEMBLY	EA
	2	153-2049	SET SCREW	EA
5	1	164-8073F	HANDLE ASSEMBLY <b>(COMPLETE)</b>	EA
6	2	158-6645	SKID GUIDE	EA
7	2	153-7002AA	LDS/DRIVE WHEEL (NO SET SCREW) (2 IN.)	EA
	2	153-2819	SET SCREW (NOT SHOWN) <b>5/16 - 24 X 3/8</b>	EA
8	2	153-7013	DRIVE WHEEL (NO SET SCREW) (4 IN.)	EA
	2	153-2819	SET SCREW <b>(NOT SHOWN) 5/16 - 24 X 3/8</b>	EA



DETAIL A

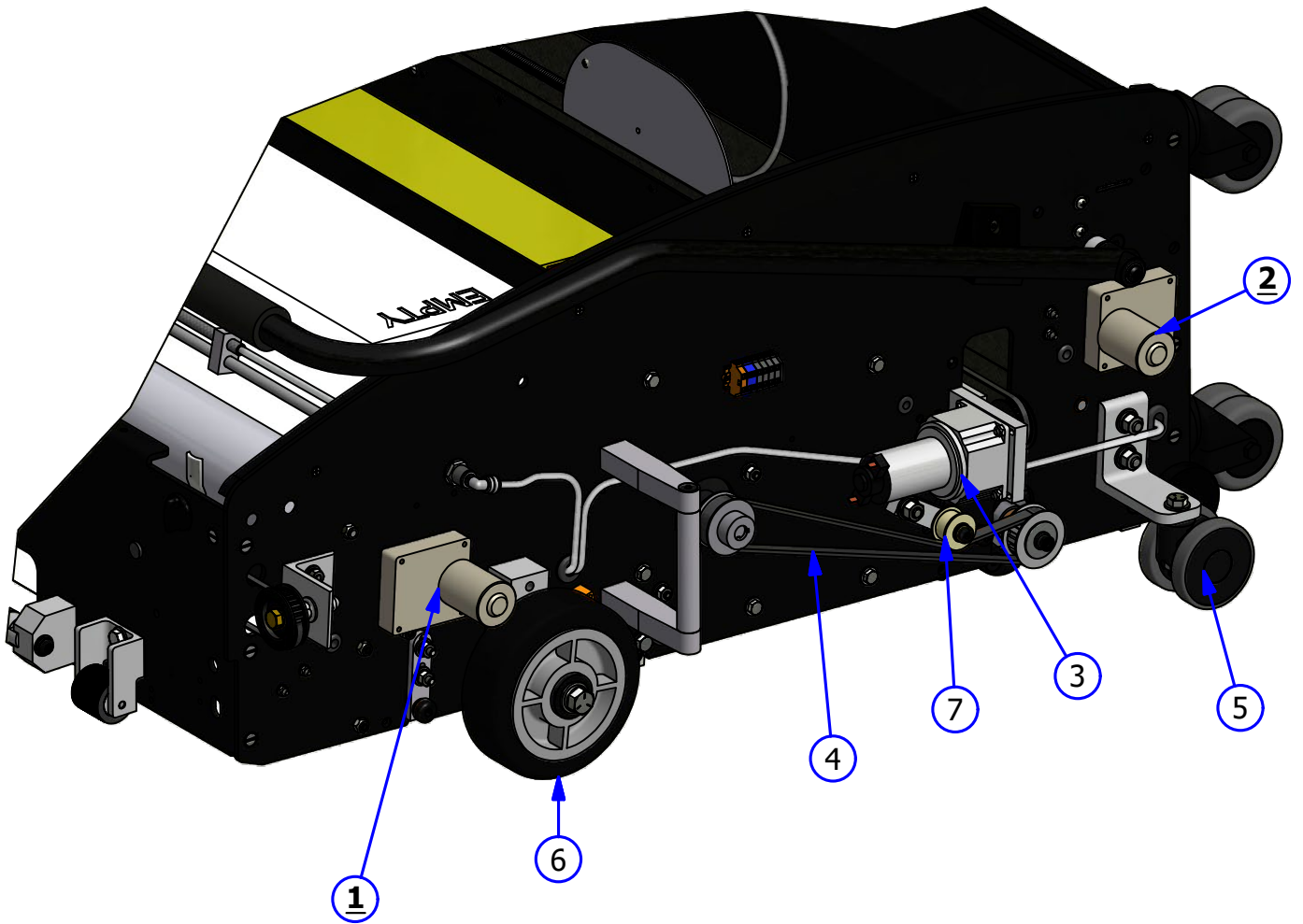


DETAIL B

**Left Side View**

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INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	2	158-8403	ASSEMBLY - DUSTER MOTOR <b>24VDC</b>	EA
2	1	158-8402	SQUEEGEE / BRUSH LIFT MOTOR - <b>24 VDC</b>	EA
3	1	158-8405	HEAD DRIVE MOTOR ASSEMBLY	EA
		154-9607	PULLEY FOR HEAD DRIVE ( <b>NOT SHOWN</b> )	EA
4	1	164-9019	BUFFER MOTOR BELT - <b>315L050</b>	EA
5	2	164-0022	L TO L CASTER ASSEMBLY	EA
6	2	158-7002	<b>6" X 2"</b> BLACK WHEEL ASSEMBLY	EA
7	1	153-8039	BUFFER IDLER PULLEY	EA

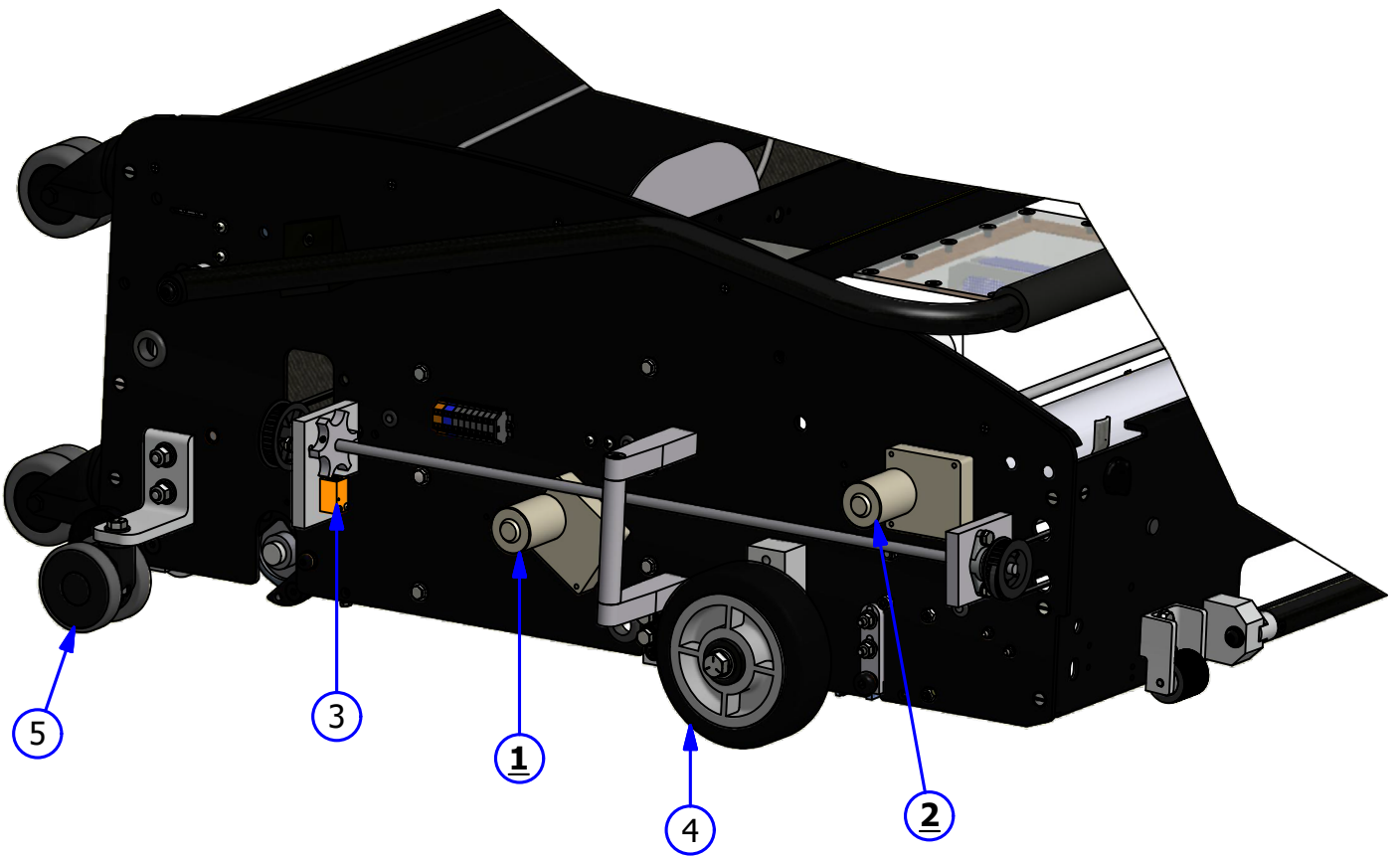


### Right Side View

Rev. 3/21

INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	2	158-8402	SQUEEGEE / BRUSH LIFT MOTOR - <b>24VDC</b>	EA
2	2	158-8403	DUSTER MOTOR ASSEMBLY - <b>24VDC</b>	EA
-				
3	1	154-1220	PROXIMITY SENSOR	EA
4	2	158-7002	<b>6"</b> WHEEL ASSEMBLY	EA
5	2	164-0022	L TO L CASTER ASSEMBLY	EA

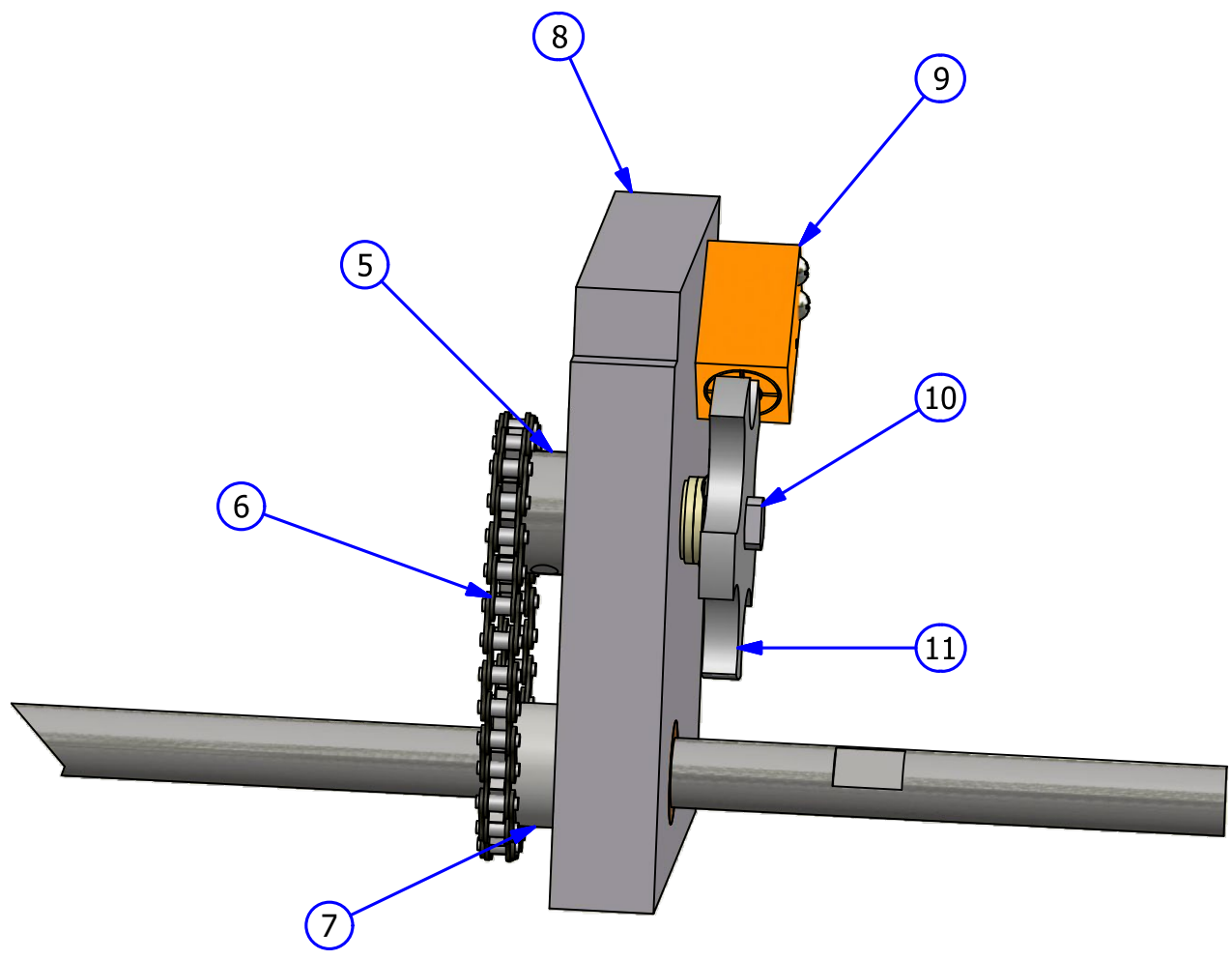
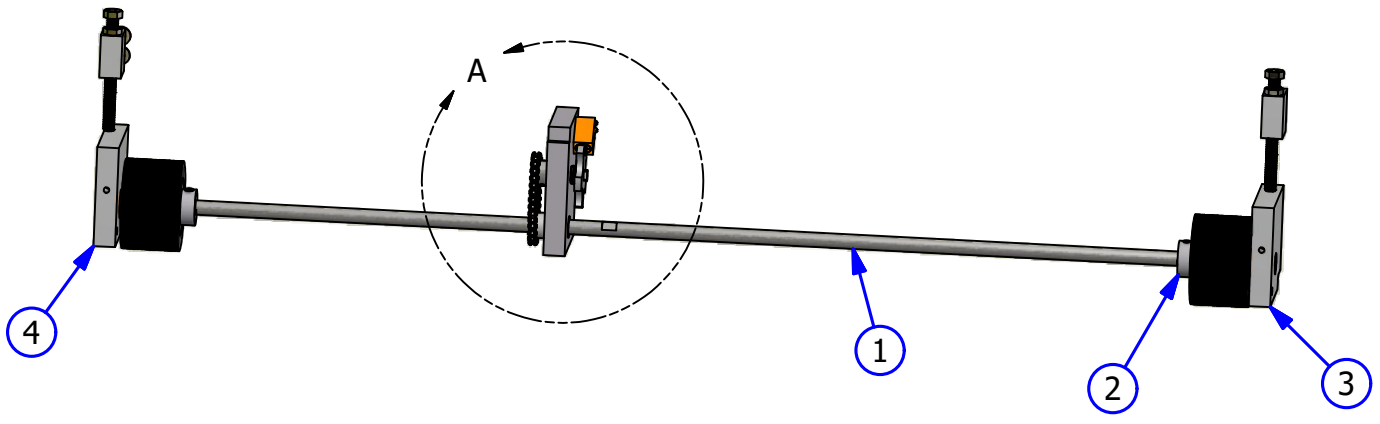




## LDS Assembly

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<b>INDEX NUMBER</b>	<b>QTY.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>UOM</b>
1	1	154-6821	LDS SHAFT ASSEMBLY	
2	1	153-7002AA	LDS/DRIVE WHEEL (NO SET SCREW) (2 IN.)	EA
	2	153-2819	SET SCREW - 10-32 X 3/8	EA
3	1	154-8619	LDS MOUNTING BLOCK ASSEMBLY - <b>LEFT</b>	EA
4	1	154-8621	LDS MOUNTING BLOCK ASSEMBLY - <b>RIGHT</b>	EA
5	1	154-9213	SPROCKET 25B15 (1/2") 1/4-20 SET SCREW	EA
6	1	154-9211	LDS AND TACH SENSOR DRIVE CHAIN #25	EA
	1	153-9045	MASTER LINK #25 ( <b>NOT SHOWN</b> )	EA
7	1	153-9010	SPROCKET - 25B15 (3/8")	EA
8	1	154-8320	LDS MOUNTING BLOCK ASSEMBLY - CENTER	EA
9	1	154-1220	PROXIMITY SENSOR	EA
10	1	154-6264	SHAFT FOR TIMING DISK ASSEMBLY	EA
11	1	154-6717	5 TOOTH SENSOR DISK	EA

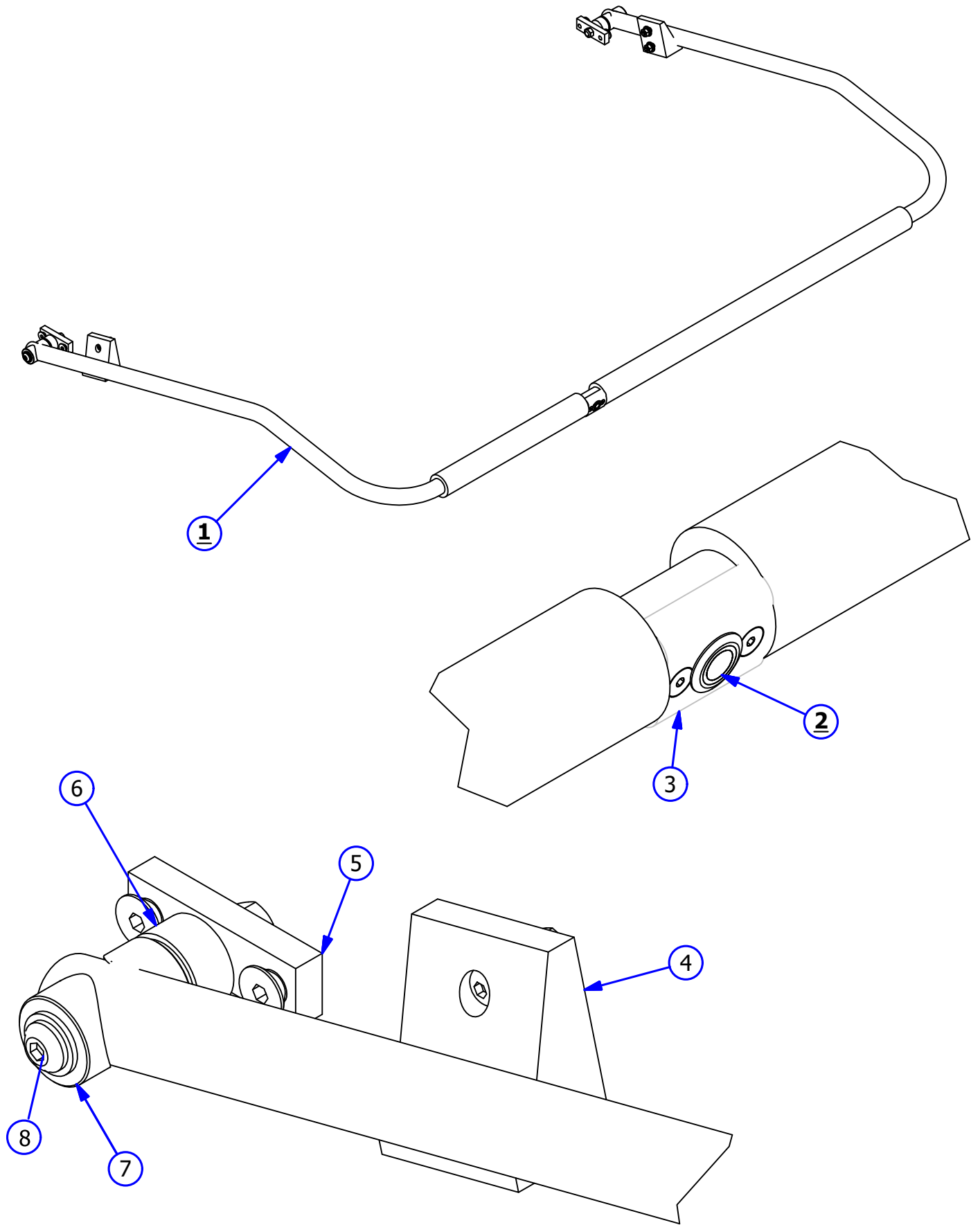


DETAIL A

## Handle Assembly

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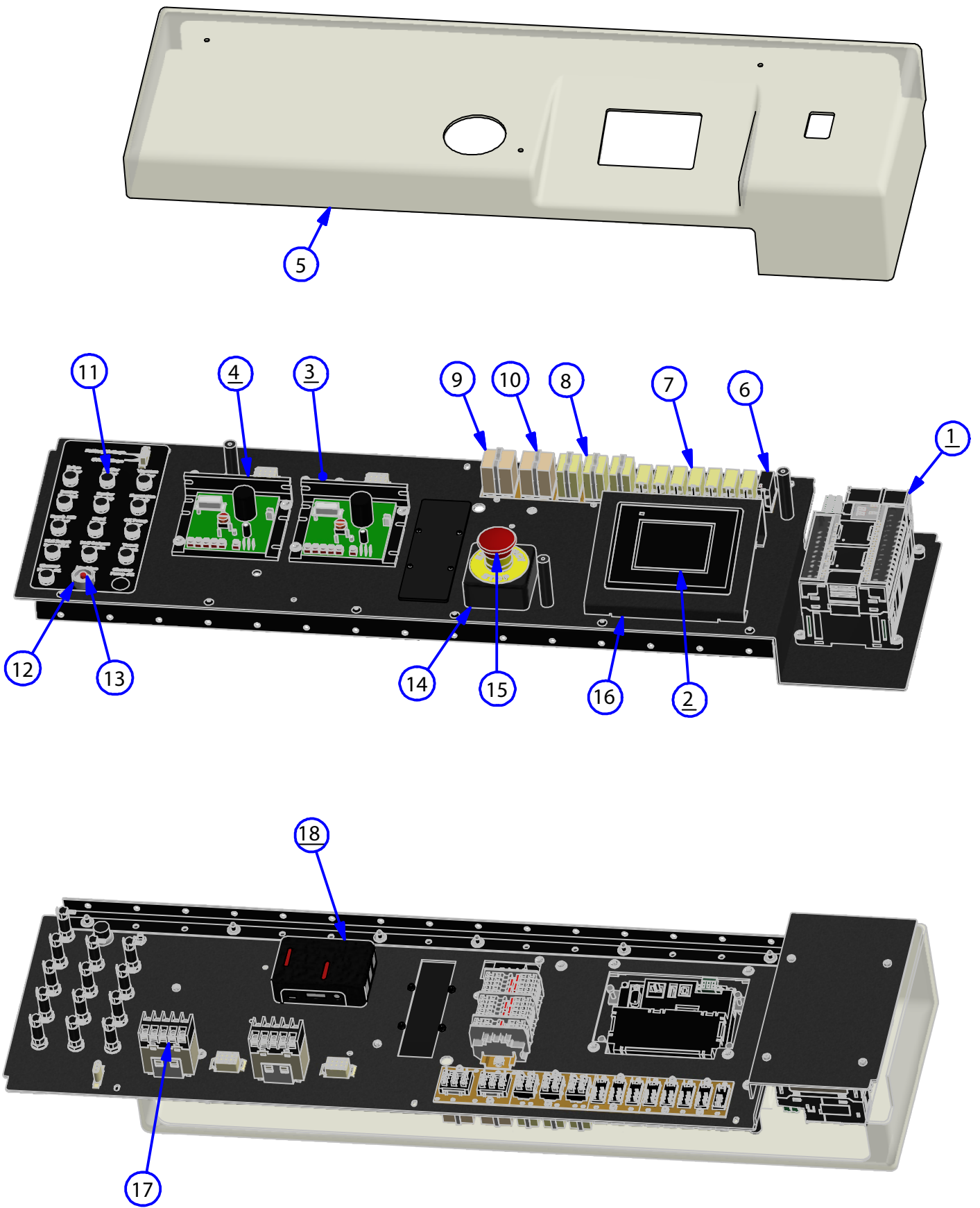
INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	164-8012	HANDLE ASSEMBLY <b>(COMPLETE)</b>	EA
-				
2	1	164-8013	HANDLE BUTTON REPLACEMENT ASSEMBLY <b>(W/WIRES)</b>	EA
-				
3	1	164-6083	BUTTON COLLAR	EA
	2	158-2003	SCREW <b>8-32 X 1/2</b> FHCS BLK OXIDE	EA
4	2	164-6057	HANDLE CATCH	EA
5	2	164-6084A	HANDLE MOUNT - <b>3/8"</b>	EA
6	2	164-6058A	HANDLE SPACER - <b>3/8"</b>	EA
7	4	164-2001	UNTHREADED CURVED SPACER BLACK	EA
8	2	164-2093	HHCS FLANGED <b>3/8 - 16 X 3</b> PARTIAL THREAD	EA



## PLC Plate Assembly

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INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	158-1610P	PLC FOR IKON - SPECIFY SOFTWARE VERSION	EA
	1	158-1610S	SERIAL CONVERTER	EA
	1	164-1235	CABLE TO TOUCHSCREEN - <b>24IN (NOT SHOWN)</b>	EA
2	1	164-8803	<b>3"</b> TOUCH SCREEN ASSEMBLY	EA
	1	164-1234	SCREEN PROTECTOR <b>(NOT SHOWN)</b>	EA
3	1	164-8807	SPEED CONTROL ASSEMBLY - DRIVE	EA
4	1	164-8806	SPEED CONTROL ASSEMBLY - CLEANER PUMP	EA
5	1	164-6815	CLEAR PC PLATE COVER	EA
6	1	158-1460	RELAY SOLID STATE	EA
7	7	158-1458	RELAY - OMRON 24DC DPDT GENERAL PURPOSE	EA
8	3	158-1462	24 V RELAY DPDT 10A W/DIODE	EA
9	2	164-1231	LY3 RELAY	EA
10	2	164-1207	LY3 RELAY CLIP	EA
11	13	153-1028	PANEL-MOUNT FUSE HOLDER - UL <b>(COMPLETE)</b>	EA
12	1	153-1209	BUTTON GUARD	EA
13	1	158-8439	PUSH BUTTON <b>(RED = NORMALLY OPEN)</b>	EA
14	1	164-6161	E-STOP BOX	EA
15	1	164-8223	E-STOP SWITCH ASSEMBLY	EA
	1	164-1223B	BREAKER FOR ESTOP	EA
16	1	164-6805-2850	TOUCH SCREEN MOUNT	EA
17	2	158-1465	CONTACTOR 24VDC	EA
18	1	164-8820A	WI-FI ADAPTER REPLACEMENT ASSEMBLY	EA
19	3	153-2086A	MS PHILLIPS - <b>8 - 32 X 3/8</b>	EA

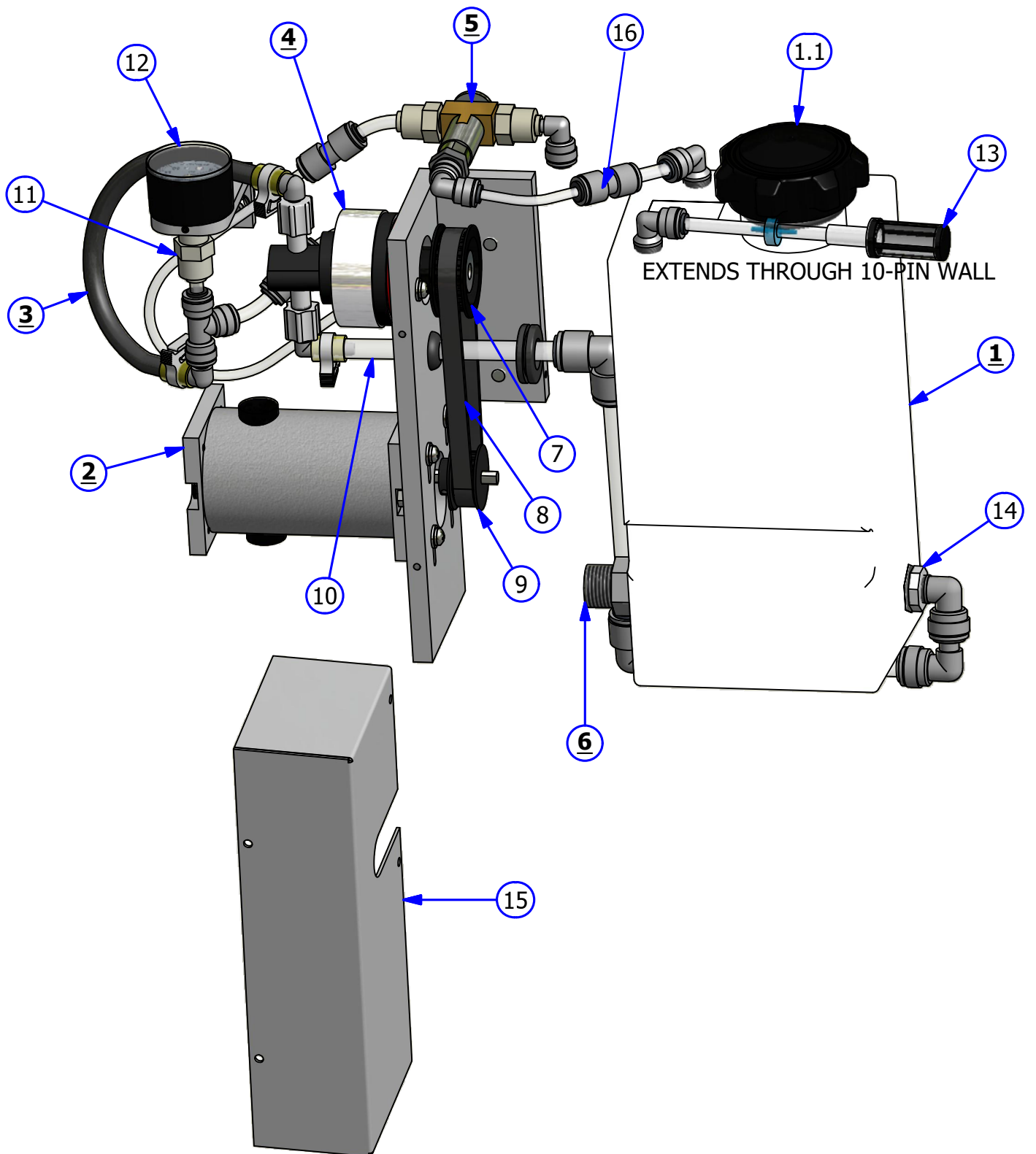


# OIL VALVE ASSEMBLY

REV. 3/21

INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	154-8682	CONDITIONER TANK ASSEMBLY	EA
	1	164-8081	SUPPLY TANK CAP <b>(NOT SHOWN)</b>	EA
	1	164-0021	GASKET FOR SUPPLY TANK CAP <b>(NOT SHOWN)</b>	EA
2	1	158-8401A	OIL PUMP MOTOR ASSEMBLY	EA
	1	158-1422G	OIL PUMP MOTOR BRUSHES <b>(PAIR)</b>	EA
3	1	154-8816	PULSE SUPPRESSION TUBE	EA
4	1	154-1214	FLUID METERING PUMP - 0.05 ML/STROKE	EA
5	1	154-8298	OIL CONTROL VALVE (24VDC) WITH EXTENDED WIRES	EA
				EA
6	1	154-8693	FLOAT SWITCH ASSEMBLY	EA
7	1	154-9607	PULLEY - <b>(24XL037 - 5/16" BORE)</b>	EA
8	1	154-9202A	CONDITIONER PUMP BELT <b>(130XL037)</b>	EA
9	1	154-9404	PULLEY <b>16XL037 X 1/4" BORE</b>	EA
10	16.5	154-0202	PUMP TUBING STOCK <b>(3/8" OD X 1/4"ID)</b>	IN
11	1	154-0257	FEMALE CONNECTOR - <b>1/4" TUBE X 1/8" FPT</b>	EA
12	1	158-1613	PRESSURE GAUGE - <b>60PSI</b>	EA
13	1	164-8851	MANUAL VENT VALVE ASSEMBLY	EA
14	1	154-0212	OIL TANK FILTER ASSEMBLY	EA
15	1	154-6287	GUARD FOR PUMP	EA
16	1	154-0248	REDUCING UNION CONNECTOR - <b>1/4" X 3/16"</b>	EA

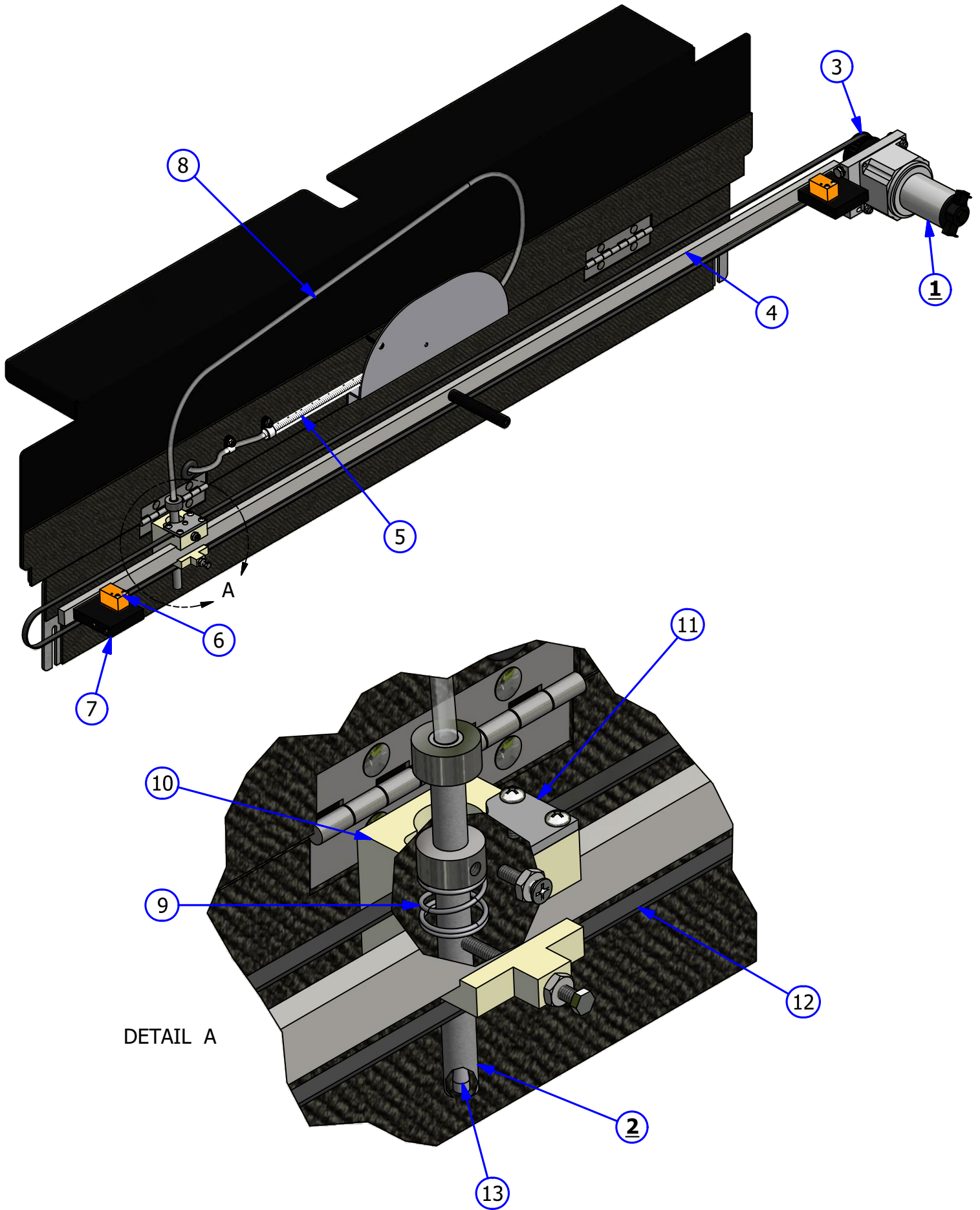




## Oil Head Assembly

Rev. 3/21

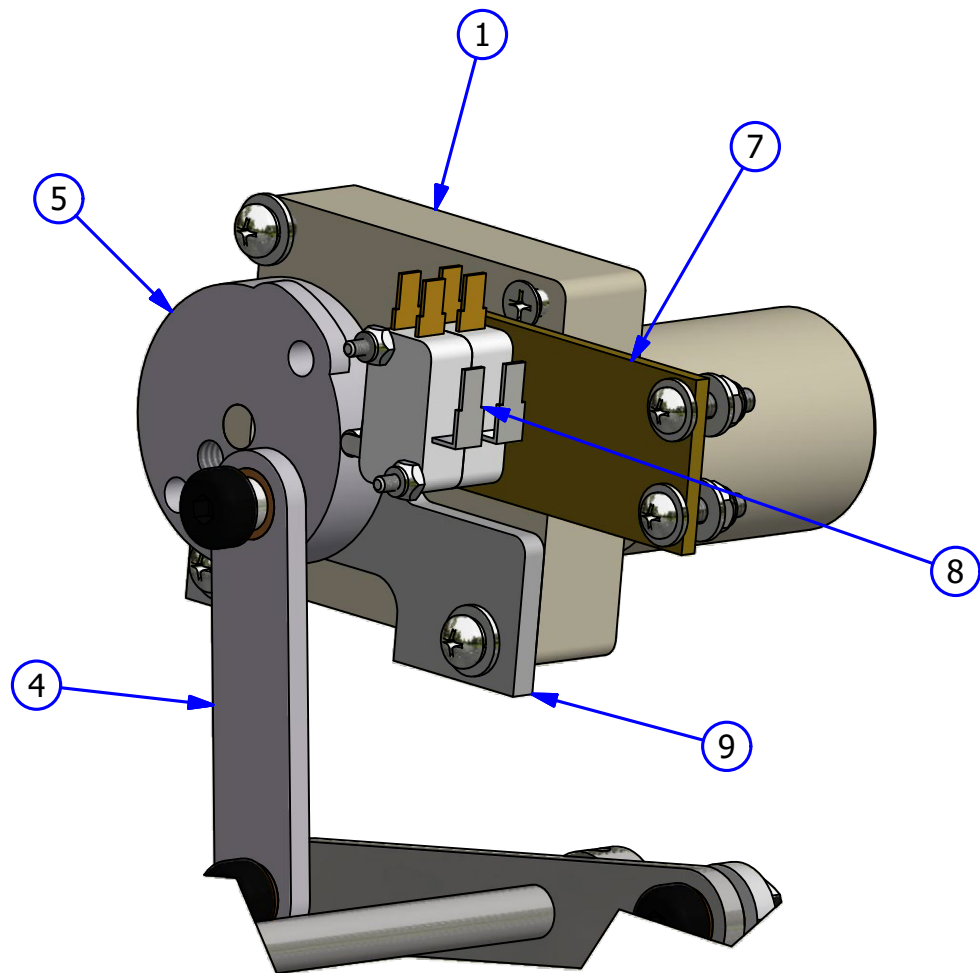
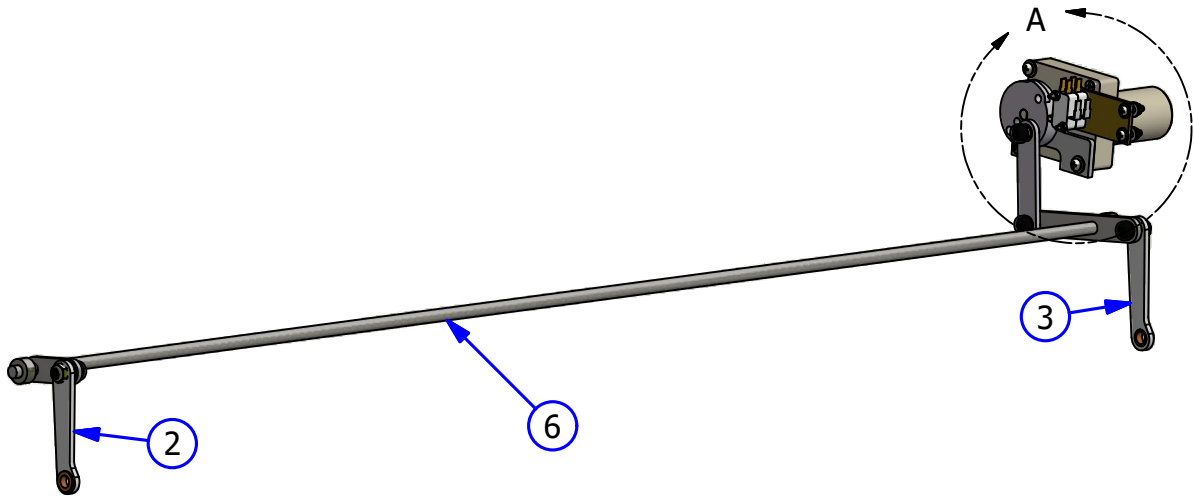
INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	158-8405	OIL HEAD DRIVE MOTOR ASSEMBLY	EA
	1	158-1404B	BRUSHES HEAD DRIVE MOTOR <b>(NOT SHOWN) (PAIR)</b>	EA
2	1	154-8851	OIL HEAD HOSE <b>(4.5 IN.)</b> AND TIP ASSEMBLY	EA
3	1	154-9607	PULLEY	EA
4	1	154-6647A	SLIDING HEAD BAR ASSEMBLY	EA
5	1	154-0206	SPRING FOR OIL HOSE TIP ASSEMBLY	EA
6	2	154-1220	PROXIMITY SENSOR	EA
7	2	164-6927	HEAD BAR MOUNTING BLOCK	EA
8	1	154-0202A	PENCIL TUBING STOCK	IN
9	1	153-2713	OIL HEAD SPRING	EA
10	1	154-6893	OIL HEAD ASSEMBLY	EA
11	1	154-6646	HEAD MOUNT PLATE ASSEMBLY	EA
12	1	154-9201	BELT FOR HEAD DRIVE <b>(XL025 - 110 INCHES)</b>	EA
13	1	154-6832	OIL PENCIL TIP ASSEMBLY	EA



### Brush Lift Rod Assembly

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INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	158-8402	SQUEEGEE / BRUSH LIFT MOTOR - <b>24VDC</b>	EA
2	1	154-8639	BUFFER BRUSH LOWER LINK - <b>RIGHT</b>	EA
3	1	154-8638	BUFFER BRUSH LOWER LINK - <b>LEFT</b>	EA
4	1	154-8837	BRUSH LIFT ROD TO CAM LINK	EA
5	1	154-6243	MOTOR CAM-DUAL LOBES (STACKED SWITCHES)	EA
6	1	154-8637	BRUSH LIFT ROD ASSEMBLY	EA
7	1	154-6824	CAM SWITCH PLATE	EA
8	2	153-1203	MICROSWITCH W/ROLLER ( <b>SQUEEGEE / BRUSH</b> )	EA
9	1	158-8634	SQUEEGEE/BRUSH MOUNT PLATE ASSEMBLY	EA
	1	158-9614	BALL BEARING MINITURE ( <b>NOT SHOWN</b> )	EA

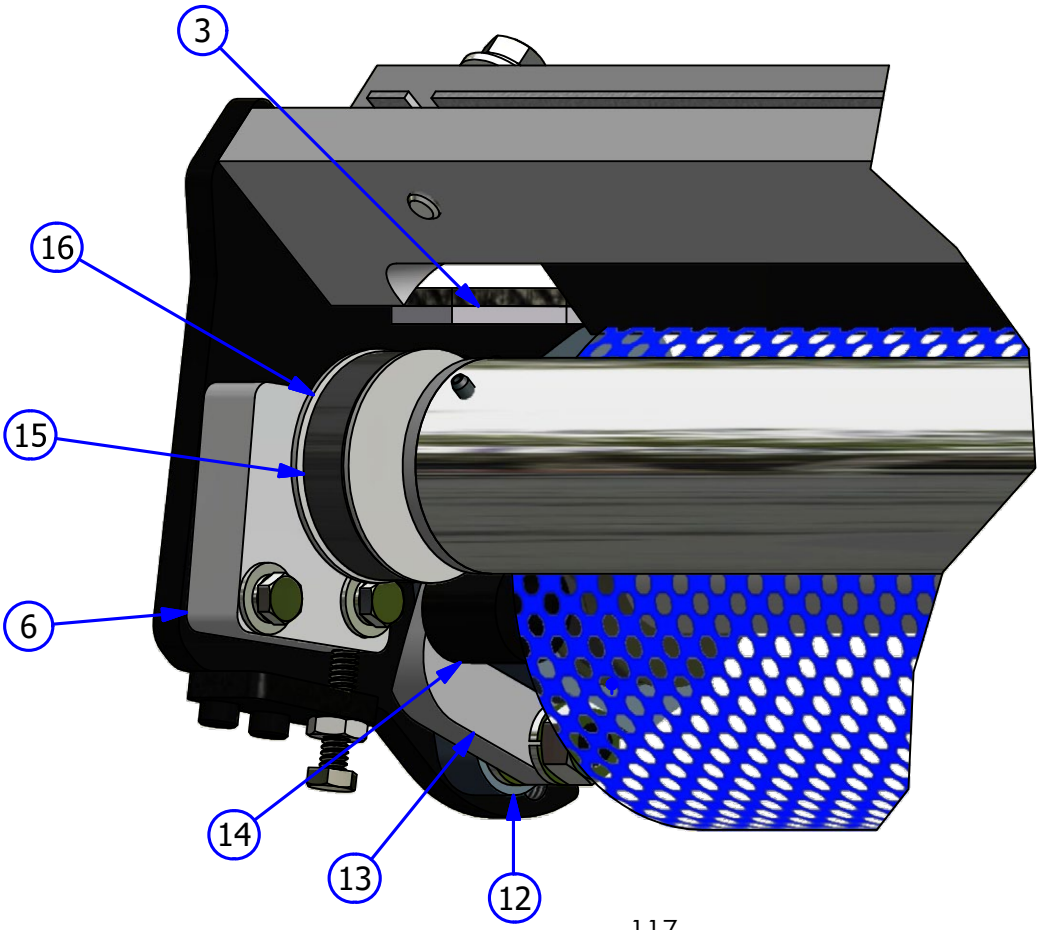
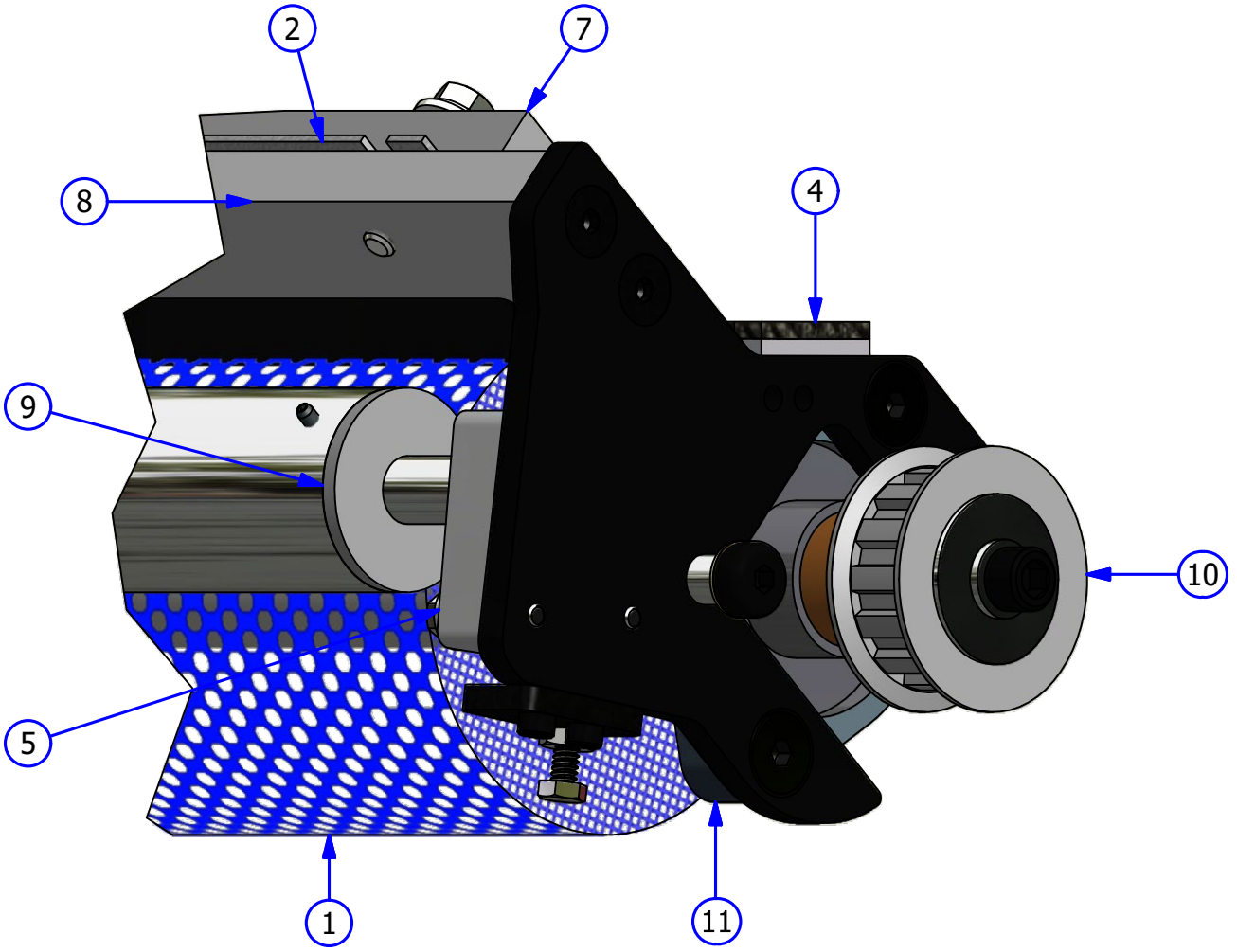


DETAIL A

## Oil Transfer Assembly

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INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	164-8001A	BUFFER BRUSH ASSEMBLY	EA
2	1	164-0866	SINGLE TRANSFER BRUSH ASSEMBLY	EA
3	1	164-8805	DRIP PAD ASSEMBLY <b>(SOLD IN PAIRS)</b>	PR
4	1	164-8805	DRIP PAD ASSEMBLY <b>(SOLD IN PAIRS)</b>	PR
5	1	164-8046	BEARING MOUNT ASSEMBLY - <b>RIGHT</b>	EA
6	1	164-8045	BEARING MOUNT ASSEMBLY - <b>LEFT</b>	EA
7	1	158-6735	BRUSH TRACK MOUNT SUPPORT	EA
8	1	158-6732	SINGLE BRUSH TRACK MOUNT ASSEMBLY	EA
9	1	164-8008	TRANSFER ROLLER ASSEMBLY	EA
10	1	158-9402	PULLEY - <b>14L050 X 3/4"</b> BORE NO HUB	EA
11	1	153-9816	3/4 IN. FLANGED BEARING - <b>5/16-18</b> TAPPED	EA
12	1	154-8640	FLANGED BEARING BRUSH ( <b>3/4"</b> ROTATED)	EA
13	2	164-6051	TRANSFER ROLLER IDLER BELT BLOCK	EA
14	1	158-6742	TRANSFER ROLLER BELT IDLER ROLLER ASSEMBLY	EA
15	1	154-9203	TRANSFER ROLLER BELT ASSEMBLY <b>(100XL037)</b>	EA
16	1	164-9015	PULLEY ASSEMBLY	EA



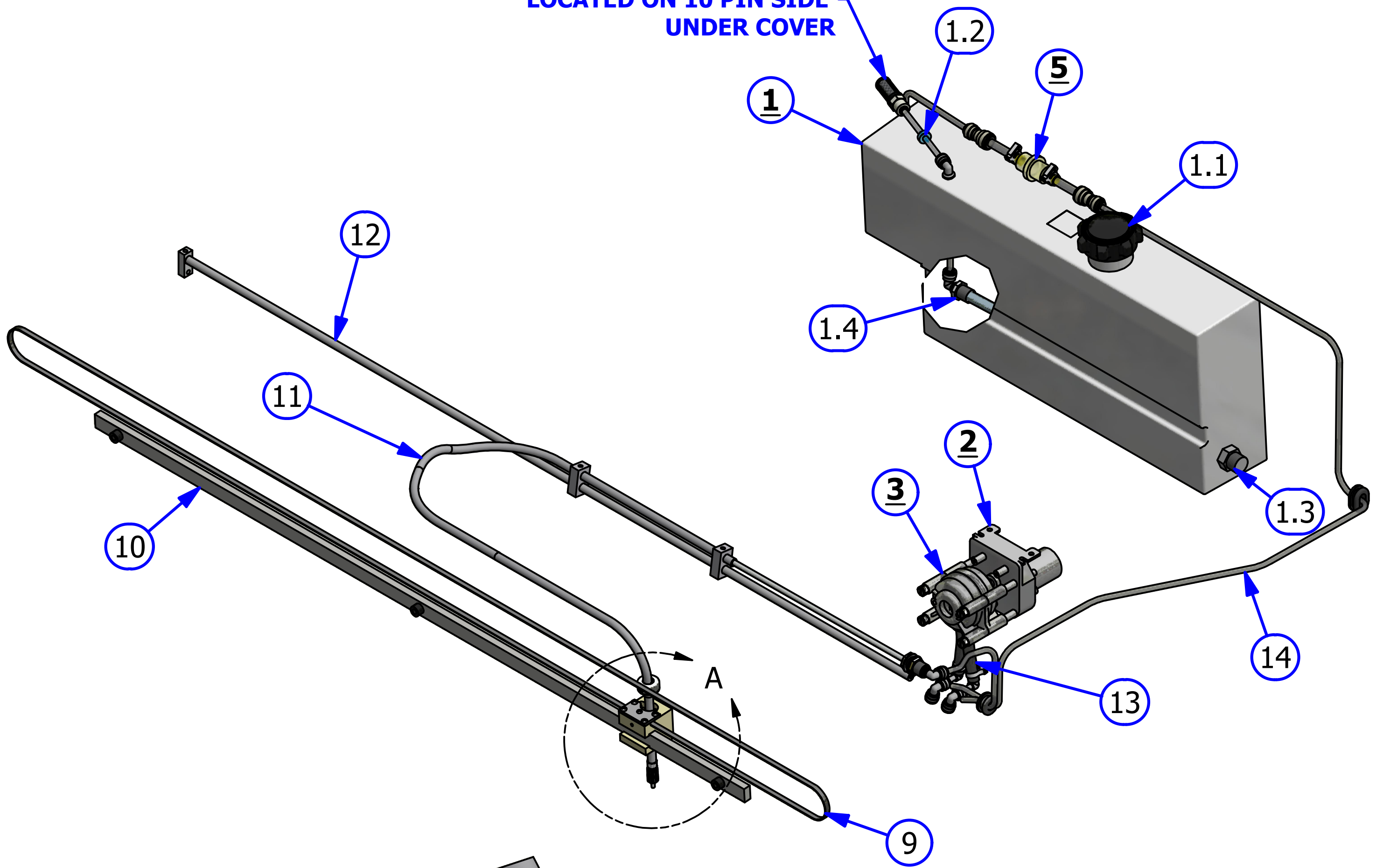
# CLEANER TANK AND HEAD ASSEMBLY

REV. 3/21

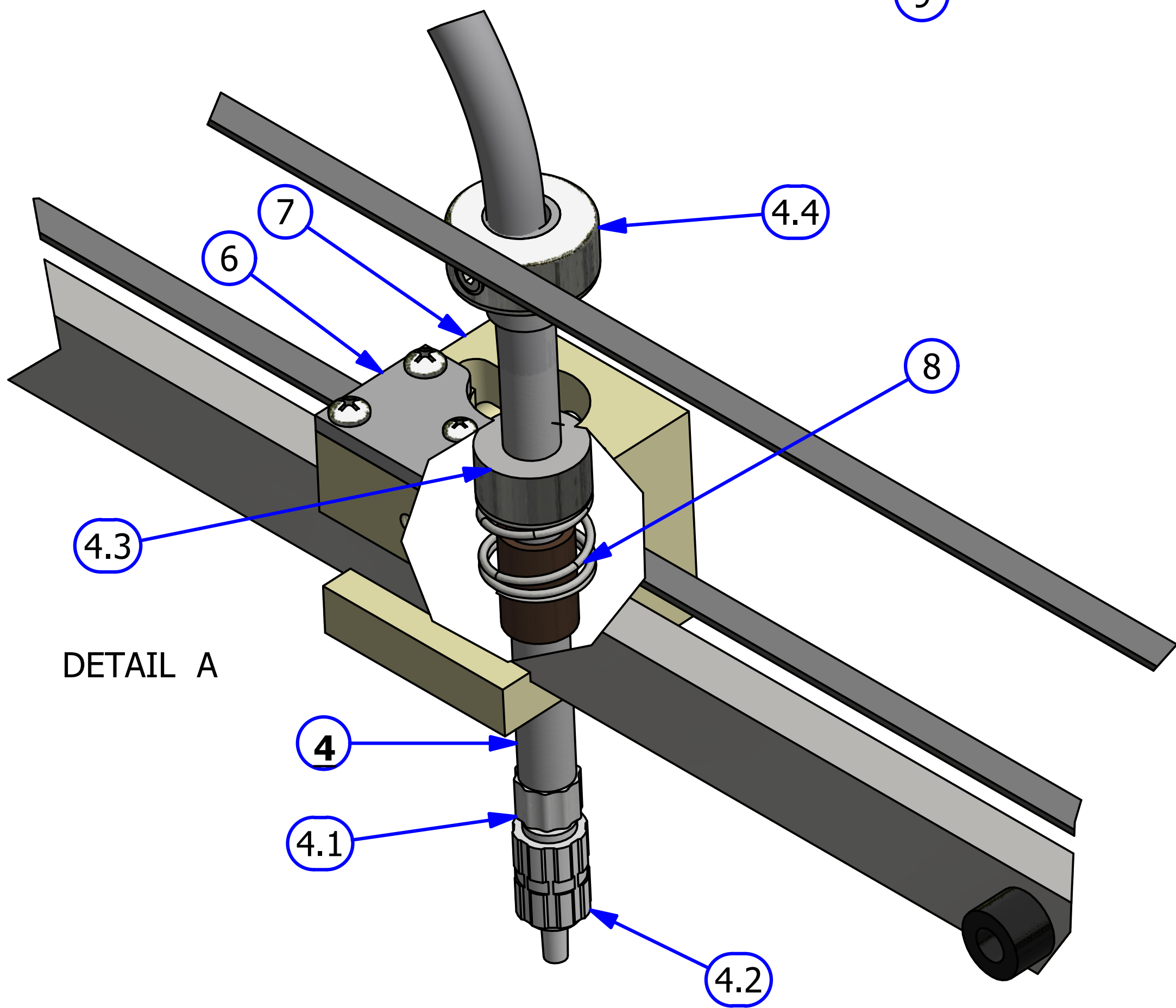
INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	158-8433C	CLEANER SUPPLY TANK ASSEMBLY ( <b>COMPLETE</b> )	EA
1.1	1	164-8081	CLEANER SUPPLY TANK CAP	EA
1.2	1	164-8852	MANUAL VENT VALVE ASSEMBLY	EA
1.3	1	154-8693	CLEANER FLOAT SWITCH ASSEMBLY	EA
1.4	1	154-0212B	FILTER ASSEMBLY	EA
1.5	1	164-0021	CLEANER SUPPLY CAP GASKET ( <b>NOT SHOWN</b> )	EA
2	1	158-8404	CLEANER PUMP MOTOR ASSEMBLY	EA
3	1	158-8404D	CLEANER PUMP ASSEMBLY	EA
4	1	154-8852	CLEANER HOSE AND TIP ASSEMBLY	EA
4.1	1	154-0863	MALE LURE HOSE BARB	EA
4.2	1	164-0012M	CLEANER TIP WITH CHECK VALVE	EA
4.3	1	153-2804	COLLAR - <b>3/8 X 3/4 X 3/8</b>	EA
4.4	1	153-2902	COLLAR - <b>1/2 X 1 1/8 X 1/2</b>	EA
5	1	154-8867A	IN LINE FILTER ASSEMBLY	EA
6	1	154-6646	CLEANER HEAD BELT MOUNT PLATE	EA
7	1	154-6882	CLEANER HEAD ASSEMBLY	EA
8	1	153-2713	SPRING FOR CLEANER HEAD ASSEMBLY	EA
9	1	154-9201	CLEANER HEAD BELT ASSEMBLY ( <b>XL025 - 110 IN.</b> )	EA
10	1	154-6877	CLEANER HEAD BAR ASSEMBLY	EA
11	1	154-0867	SPRING, CLEANER HOSE	EA
12	1	154-6889	CLEANER HOSE ROUTING BAR	EA
13	1	154-0861B	NORPRENE TUBING	EA
14	16	154-0202A	PENCIL TUBING STOCK - <b>1/4" OD X 1/8" ID</b>	IN



LOCATED ON 10 PIN SIDE  
UNDER COVER



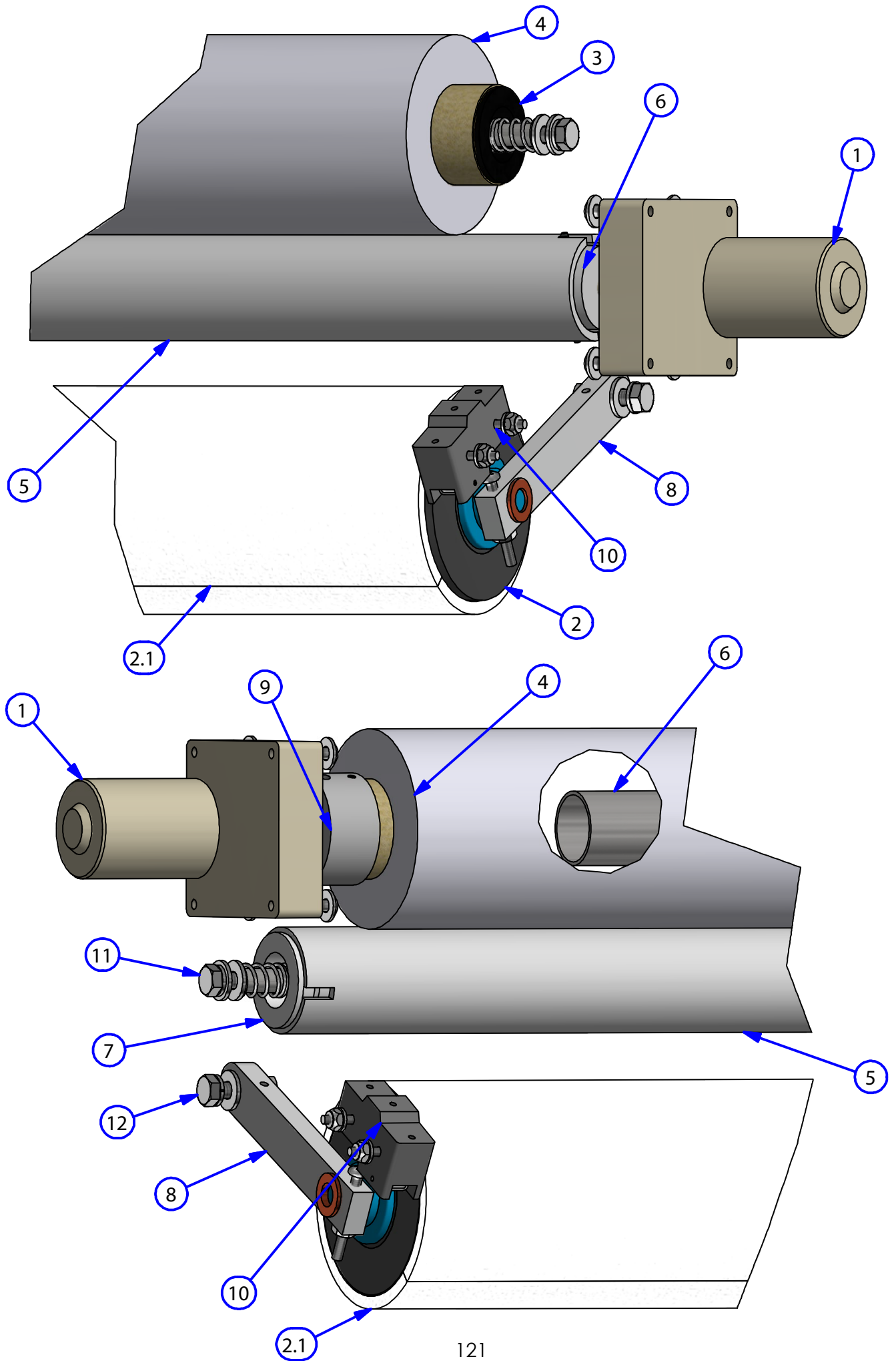
DETAIL A



## Duster Assembly

Rev. 3/21

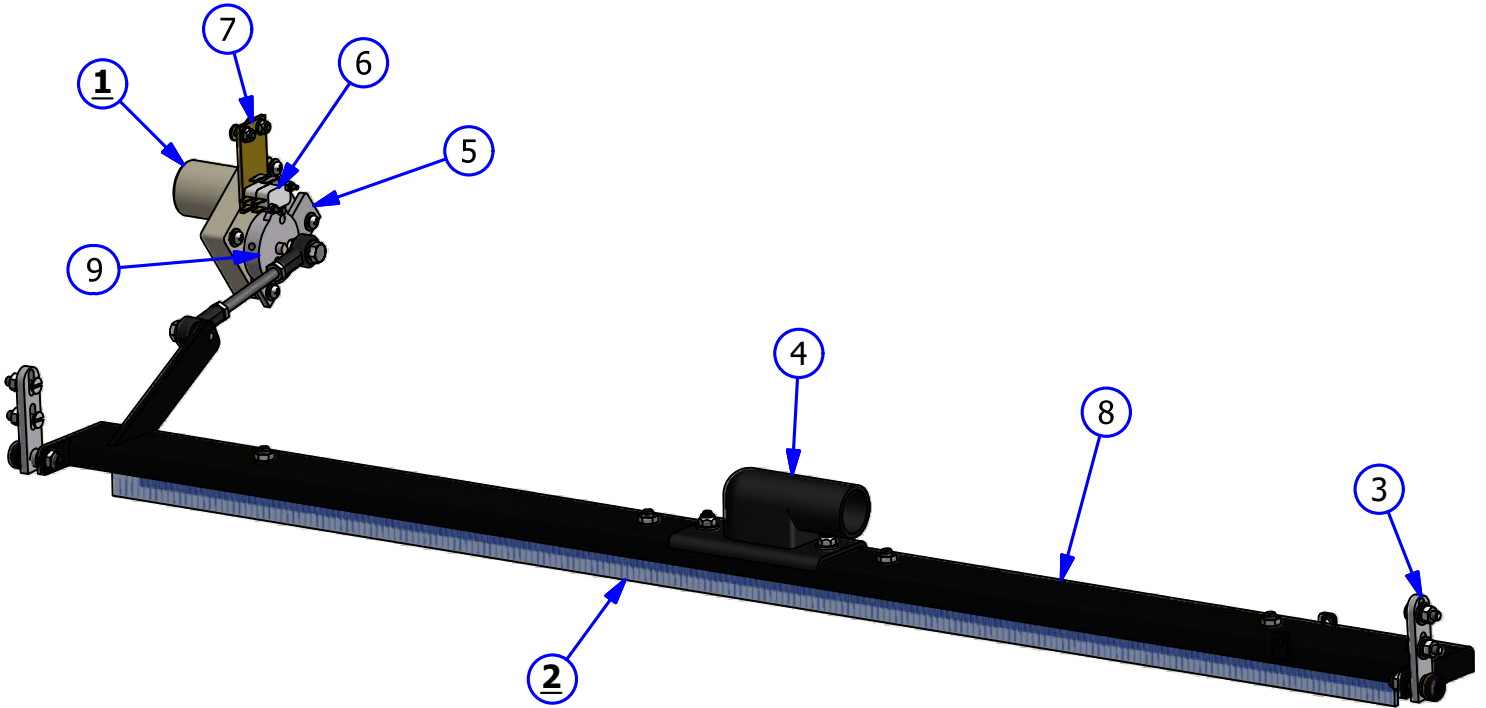
INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	2	158-8403	DUSTER MOTOR ASSEMBLY	EA
2	1	164-8839	CUSHION ROLLER ASSEMBLY	EA
3	1	164-6108A	DUSTER PLUG CARDBOARD CORE	EA
4	1	153-0047EZ	K2 SELECT DUSTER CLOTH <b>(BOX OF 4)</b>	CASE
	1	164-0047EZ	K3 SELECT DUSTER CLOTH <b>(BOX OF 3)</b>	CASE
5	1	154-0052	PVC TAKE UP REEL ASSEMBLY	EA
6	1	153-0429	DUSTER ROLL SUPPORT PIPE <b>(40 INCH)</b>	EA
7	1	164-6109A	UHMW DUSTER PLUG FOR PVC TAKE UP REEL	EA
8	2	164-8823	CUSHION ROLLER PIVOT ARM	EA
9	1	153-8202B	DUSTER SOLID DRIVE HUB (PVC- <b>1/4-28</b> )	EA
10	2	154-1603	MICROSWITCH WITHOUT ROLLER <b>(LARGE)</b>	EA
11	2	164-6174	DUSTER PLUG STUD	EA
12	2	164-6175	CUSHION ROLLER STUD	EA



## Squeegee Assembly

Rev. 3/21

INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	158-8402	SQUEEGEE / BRUSH LIFT MOTOR - <b>24VDC</b>	EA
2	1	164-8038K	SQUEEGEE BLADE AND GASKET REPLACEMENT ( <b>1 SET</b> )	EA
	1	164-0003	GASKET ( <b>NOT SHOWN</b> )	EA
3	2	154-8802	SQUEEGEE ADJUSTMENT ARM	EA
4	1	154-6677A	SQUEEGEE HOSE ADAPTER NYLON	EA
5	1	158-8634	SQUEEGEE/BRUSH MOUNT PLATE ASSEMBLY	EA
	1	158-9614	BALL BEARING MINITURE ( <b>NOT SHOWN</b> )	EA
6	2	153-1203	MICROSWITCH W/ROLLER	EA
7	1	154-6824	SQUEEGEE CAM SWITCH PLATE	EA
8	1	154-6339-2850	SQUEEGEE MOUNT ANGLE	EA
9	1	154-6243	MOTOR CAM-DUAL LOBES ( <b>STACKED SWITCHES</b> )	EA



## Vacuum Motor & Recovery Tank Assembly

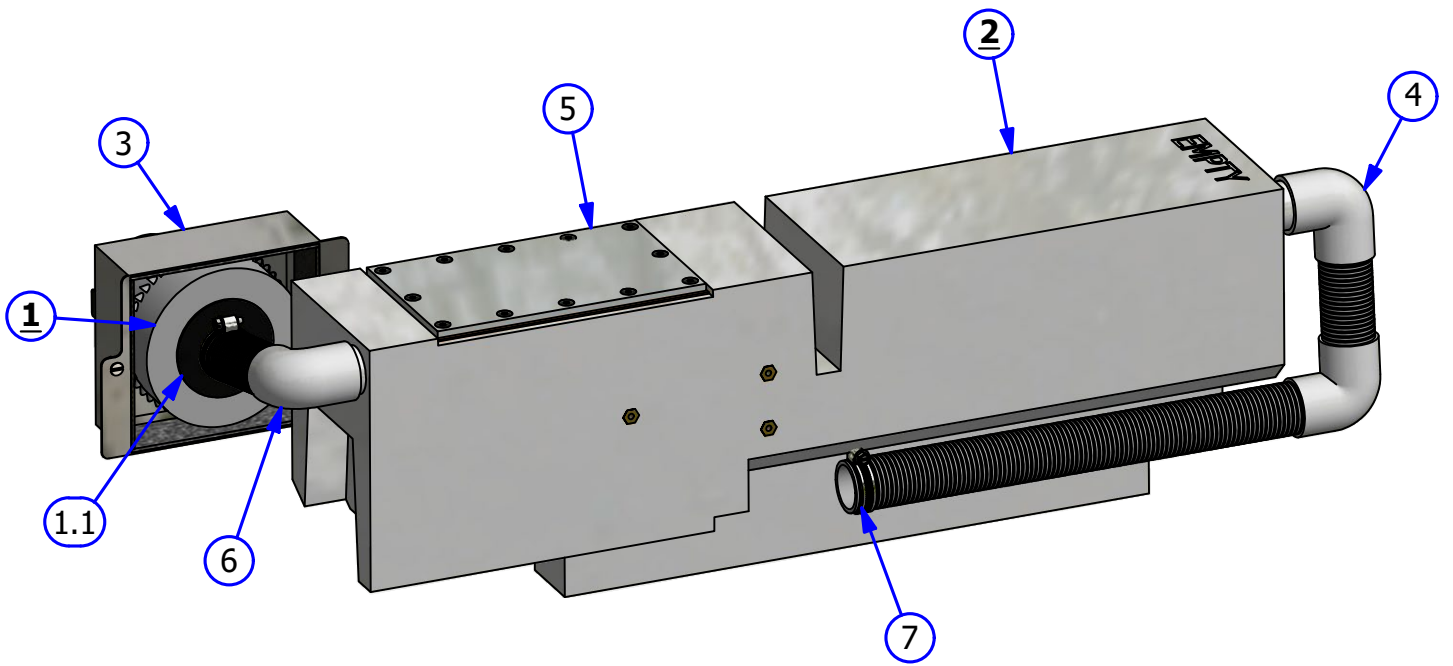
Rev. 8/21

INDEX NUMBER	QTY.	PART NUMBER	DESCRIPTION	UOM
1	1	158-8407	VACUUM MOTOR ASSEMBLY	EA
1.1	1	153-6221M	VACUUM HOSE ADAPTER	EA
	1	158-1421B	VACUUM MOTOR BRUSHES <b>(NOT SHOWN)</b>	EA
2	1	164-8017	RECOVERY TANK	EA
	1	164-8017F	RECOVERY TANK FILTER <b>(NOT SHOWN)</b>	EA
	1	158-0405	RECOVERY TANK GASKET <b>(NOT SHOWN)</b>	EA
	12	153-2968	SCREW - <b>1/4" X 3/4"</b> FSHCS <b>(NOT SHOWN)</b>	EA
3	1	158-8618	VACUUM MOTOR HOUSING	EA
4	1	164-8841	SQUEEGEE VACUUM HOSE ASSY - 2021	EA
5	1	164-6120	FLEX RECOVERY TANK COVER PLATE	EA
6	1	164-8840	VACUUM MOTOR HOSE ASSY - 2021	EA
7	1	153-2406	HOSE CLAMP <b>(2 INCH)</b>	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.**



# CHAPTER 9

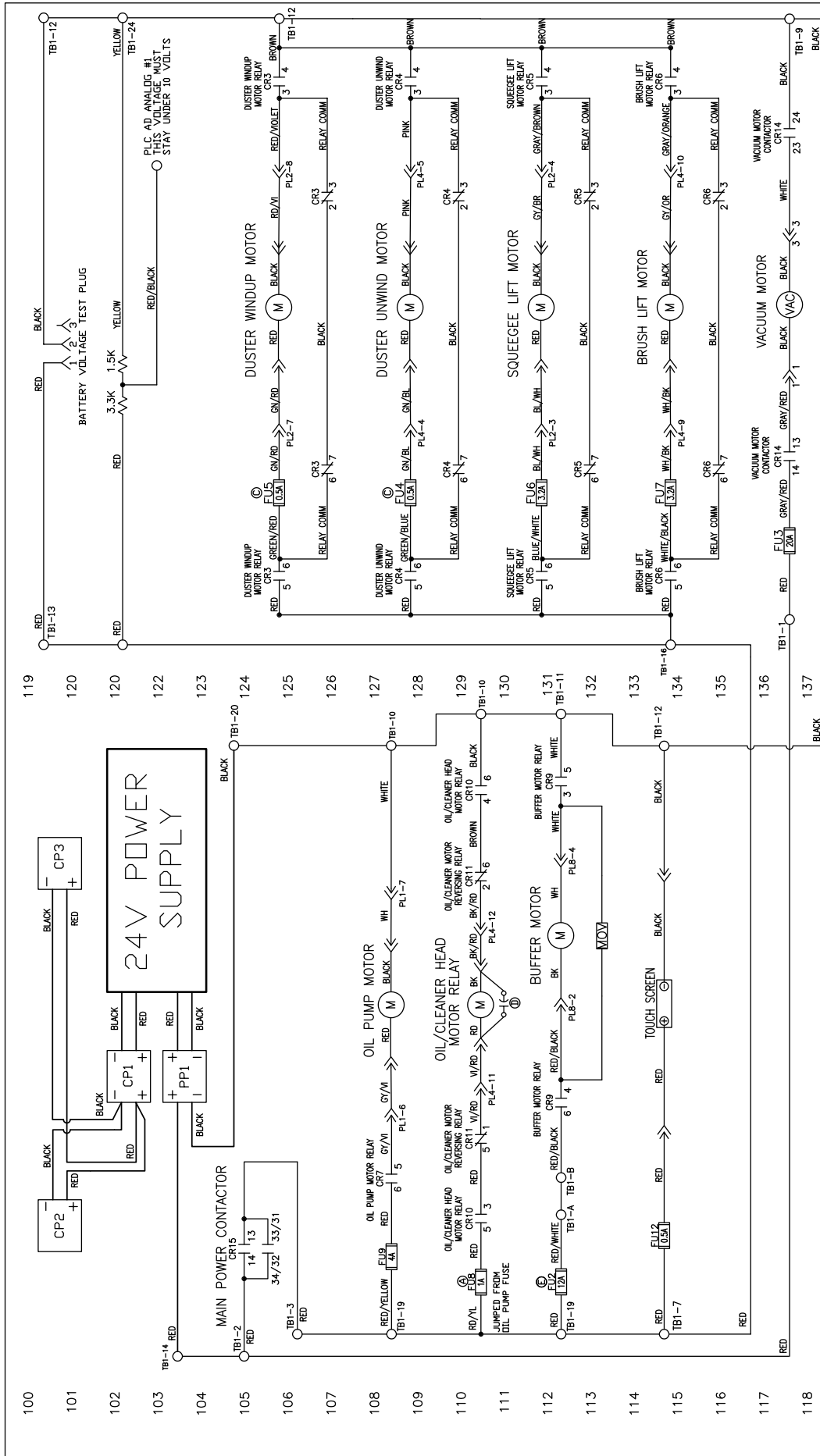
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## IKON ELECTRICAL DRAWINGS

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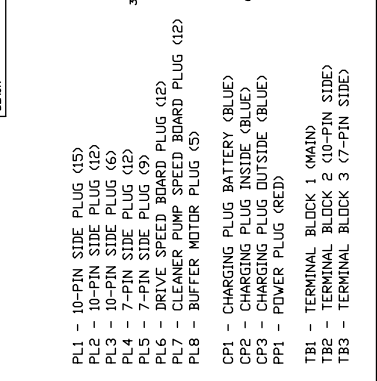
Motor Wiring Layout .....	128
Output Wiring Layout .....	129
Input Wiring Layout.....	130
Speed Control Wiring Layout .....	131
Analog Wiring Layout.....	132
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REV	DATE	DESCRIPTION
A	12/15/17	Changed Head Drive Fuse From 0.75A to 1A Car# 17117
B	01/05/18	Removed CVR CAR# 17118
C	01/08/20	Changed Duster Motor Fuses CAR# 17200
D	08/22/22	Added a 10uF Capacitor CAR# 51
E	04/24/23	Changed Fuse Size & Wire Colors on Buffer CAR#105

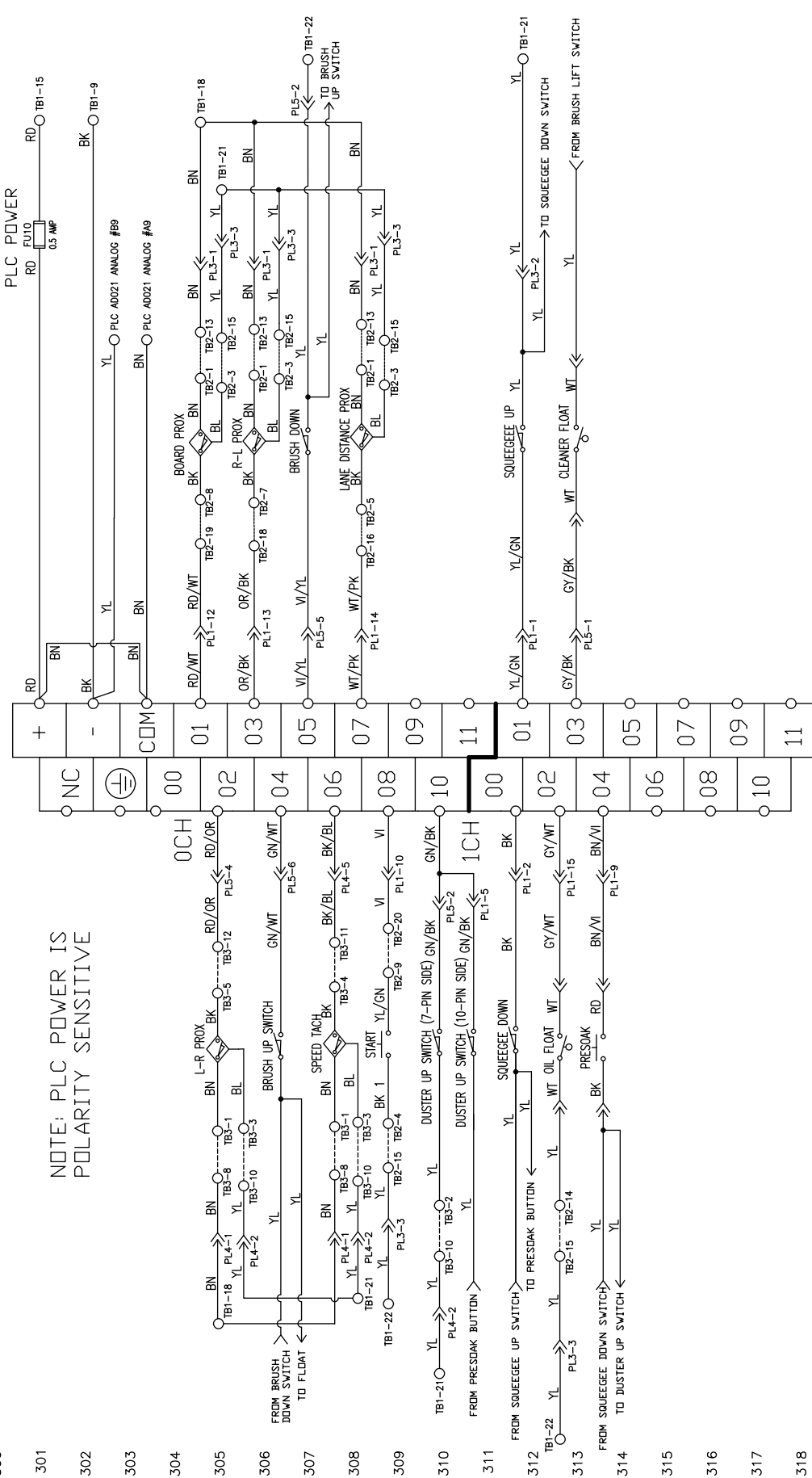
MATERIAL	
N/A	1991 LONGJAP BLDG. 53869 (983) 794-020
DESCRIPTION	KEGEL LLC
DATE	07/21/15
REV DATE	07/21/15
SIZE	QTY/MACHINE PART NUMBER
C	N/A
SCALE	N/A
SHEET	1 OF 22



- LEGEND**
- CR1 - OIL VALVE RELAY
  - CR2 - POWER OFF RELAY
  - CR3 - DUSTER WINDUP MOTOR RELAY
  - CR4 - DUSTER UNWIND MOTOR RELAY
  - CR5 - SQUEEGEE LIFT MOTOR RELAY
  - CR6 - BRUSH LIFT MOTOR RELAY
  - CR7 - OIL PUMP MOTOR RELAY
  - CR8 - CLEANER PUMP REVERSING RELAY
  - CR9 - BUFFER MOTOR RELAY
  - CR10 - OIL/CLEANER HEAD REVERSE RELAY
  - CR11 - PLC INPUT POWER/L1 0.5A
  - CR12 - REVERSE DRIVE MOTOR RELAY
  - CR13 - FORWARD DRIVE MOTOR RELAY
  - CR14 - VACUUM MOTOR CONTACTOR
  - CR15 - MAIN POWER CONTACTOR
- FU1 - DRIVE MOTOR 7.5A
  - FU2 - BUFFER MOTOR 12A/20A
  - FU3 - VACUUM MOTOR 20A
  - FU4 - DUSTER UNWIND 0.5A
  - FU5 - DUSTER WINDUP 0.5A
  - FU6 - SQUEEGEE MOTOR 3.2A
  - FU7 - BRUSH LIFT MOTOR 3.2A
  - FU8 - HEAD DRIVE MOTOR 1A
  - FU9 - OIL PUMP MOTOR 4A
  - FU10 - PLC INPUT POWER/L1 0.5A
  - FU11 - PLC OUTPUT COMMON 0.5A
  - FU12 - TOUCH SCREEN 0.5A
  - FU13 - CLEANER PUMP 3.2A
  - FU14 - BUFFER MOTOR 1A
  - FU15 - LED LIGHT 1A
  - FU16 - LED LIGHT 1A
- PL1 - 10-PIN SIDE PLUG (15)
  - PL2 - 10-PIN SIDE PLUG (12)
  - PL3 - 10-PIN SIDE PLUG (6)
  - PL4 - 7-PIN SIDE PLUG (12)
  - PL5 - 7-PIN SIDE PLUG (9)
  - PL6 - DRIVE SPEED BOARD PLUG (12)
  - PL7 - CLEANER PUMP SPEED BOARD PLUG (12)
  - PL8 - BUFFER MOTOR PLUG (5)
- CP1 - CHARGING PLUG BATTERY (BLUE)
  - CP2 - CHARGING PLUG INSIDE (BLUE)
  - CP3 - CHARGING PLUG OUTSIDE (BLUE)
  - PP1 - POWER PLUG (RED)
- TB1 - TERMINAL BLOCK 1 (MAIN)
  - TB2 - TERMINAL BLOCK 2 (10-PIN SIDE)
  - TB3 - TERMINAL BLOCK 3 (7-PIN SIDE)



DMRON SYSMAC CPHI INPUTS

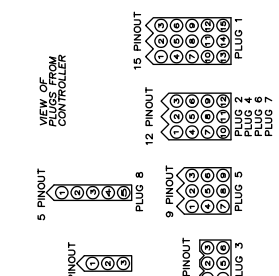


NOTE: PLC POWER IS POLARITY SENSITIVE

LEGEND

- CR1 - OIL VALVE RELAY
- CR2 - POWER OFF RELAY
- CR3 - DUSTER WINDUP MOTOR RELAY
- CR4 - DUSTER UNWIND MOTOR RELAY
- CR5 - SQUEEGEE LIFT MOTOR RELAY
- CR6 - BRUSH LIFT MOTOR RELAY
- CR7 - OIL PUMP MOTOR RELAY
- CR8 - CLEANER PUMP REVERSING RELAY
- CR9 - BUFFER MOTOR RELAY
- CR10 - DIL/CLEANER HEAD POWER RELAY
- CR11 - OIL/CLEANER HEAD REVERSING RELAY
- CR12 - REVERSE DRIVE MOTOR RELAY
- CR13 - FORWARD DRIVE MOTOR RELAY
- CR14 - VACUUM MOTOR CONTACTOR
- CR15 - MAIN POWER CONTACTOR
- FU1 - DRIVE MOTOR 7.5A
- FU2 - BUFFER MOTOR 10A/20A
- FU3 - VACUUM MOTOR 20A
- FU4 - DUSTER UNWIND 0.5A
- FU5 - DUSTER WINDUP 0.5A
- FU6 - SQUEEGEE MOTOR 3.2A
- FU7 - BRUSH LIFT MOTOR 3.2A
- FU8 - HEAD DRIVE MOTOR 1A
- FU9 - OIL PUMP MOTOR 4A
- FU10 - PLC INPUT POWER/L1 0.5A
- FU11 - PLC OUTPUT COMMON 0.5A
- FU12 - TOUCH SCREEN 0.5A
- FU13 - FORWARD DRIVE MOTOR 0.5A
- FU14 - CLEANER PUMP 3.2A
- FU15 - VACUUM MOTOR CONTACTOR
- FU16 - LED LIGHT 1A

- PL1 - 10-PIN SIDE PLUG (15)
- PL2 - 10-PIN SIDE PLUG (12)
- PL3 - 10-PIN SIDE PLUG (6)
- PL4 - 7-PIN SIDE PLUG (6)
- PL5 - 7-PIN SIDE PLUG (6)
- PL6 - DRIVE SPEED BOARD PLUG (12)
- PL7 - CLEANER PUMP SPEED BOARD PLUG (12)
- PL8 - BUFFER MOTOR PLUG (5)
- CP1 - CHARGING PLUG BATTERY (BLUE)
- CP2 - CHARGING PLUG INSIDE (BLUE)
- CP3 - CHARGING PLUG OUTSIDE (BLUE)
- PP1 - POWER PLUG (RED)
- TB1 - TERMINAL BLOCK 1 (MAIN)
- TB2 - TERMINAL BLOCK 2 (10-PIN SIDE)
- TB3 - TERMINAL BLOCK 3 (7-PIN SIDE)

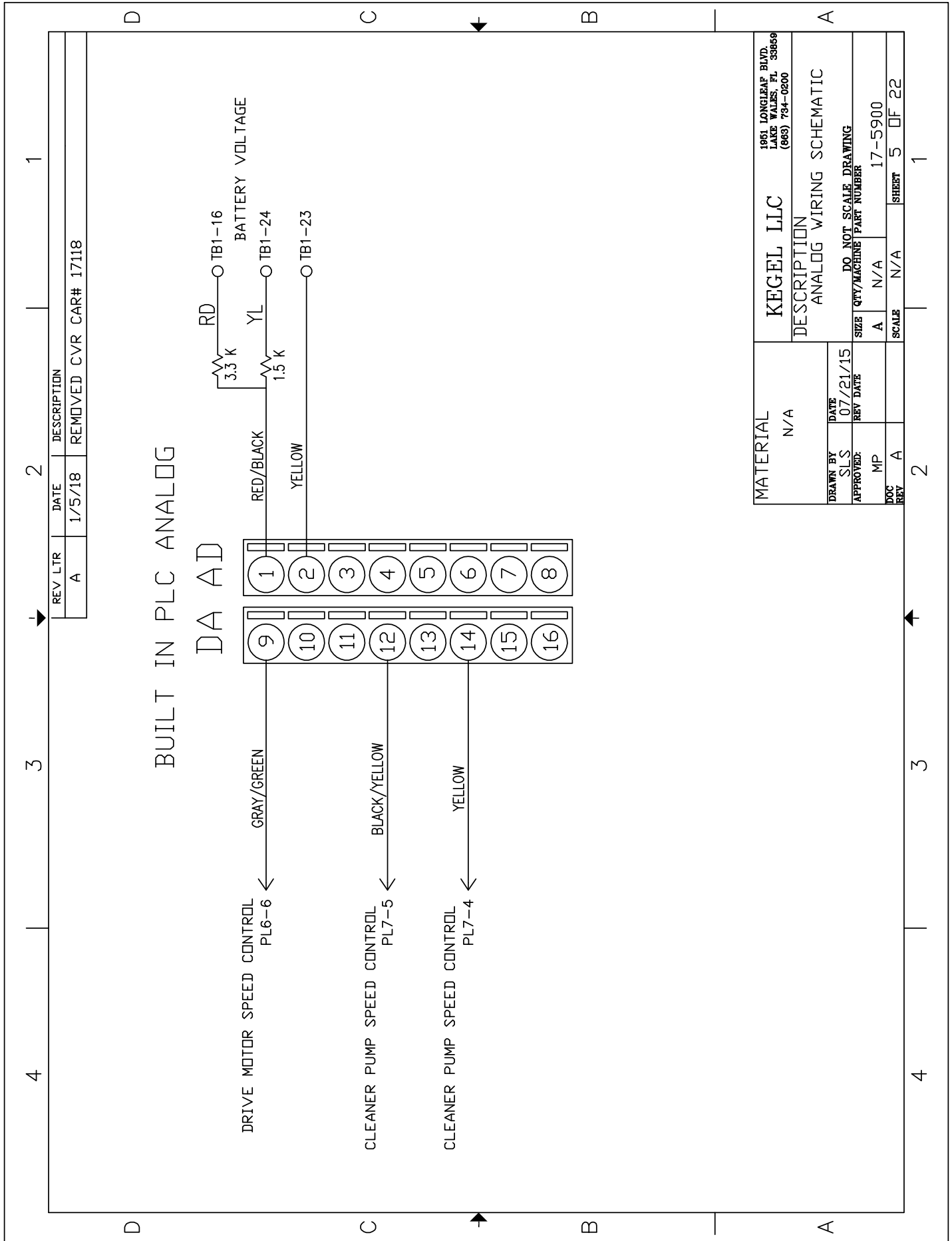


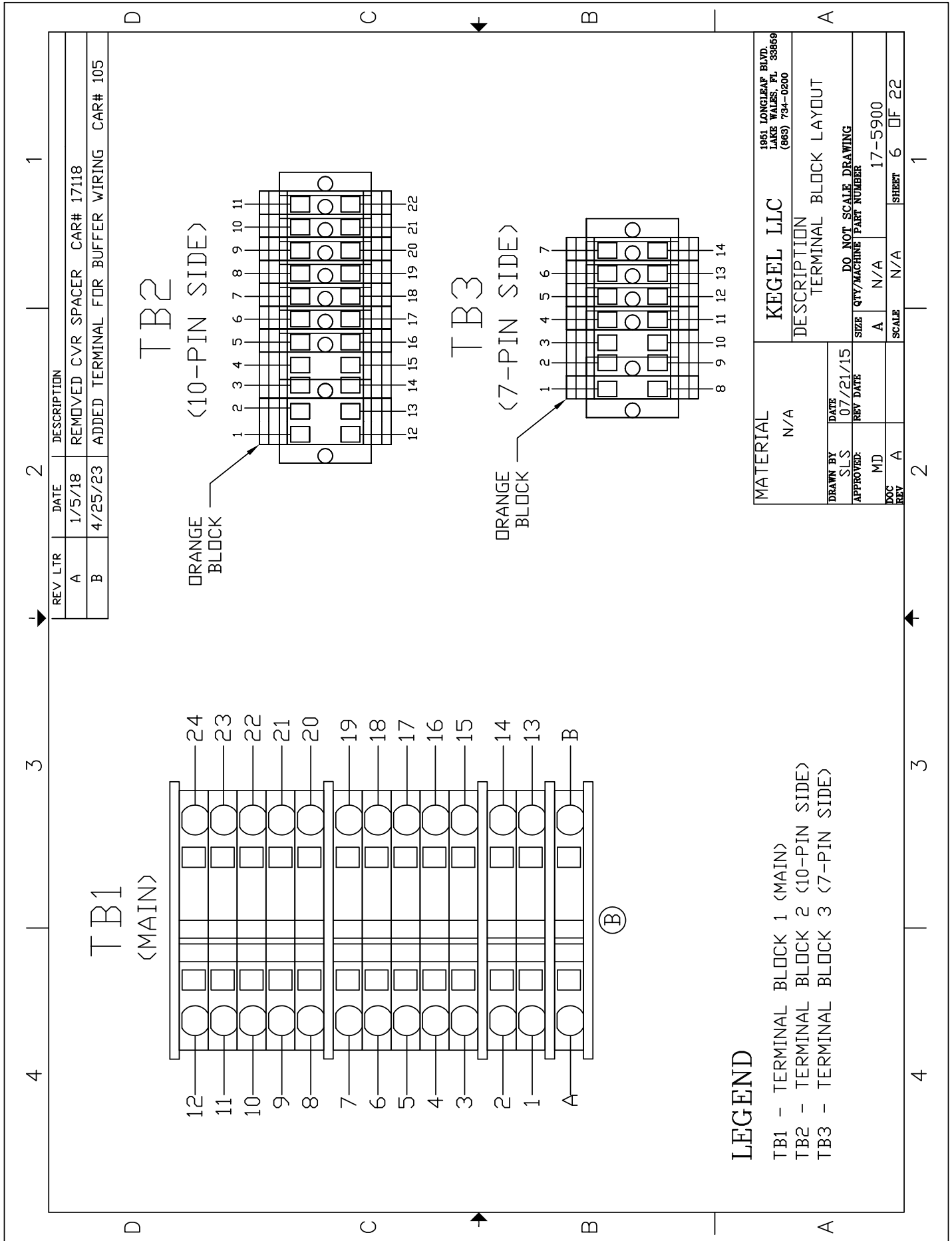
REV	DATE	DESCRIPTION
A	01/08/20	Changed Duster Motor Fuses CAR# 17200
B	04/27/23	Changed Fuse Size & Wire Colors on Buffer CAR#105

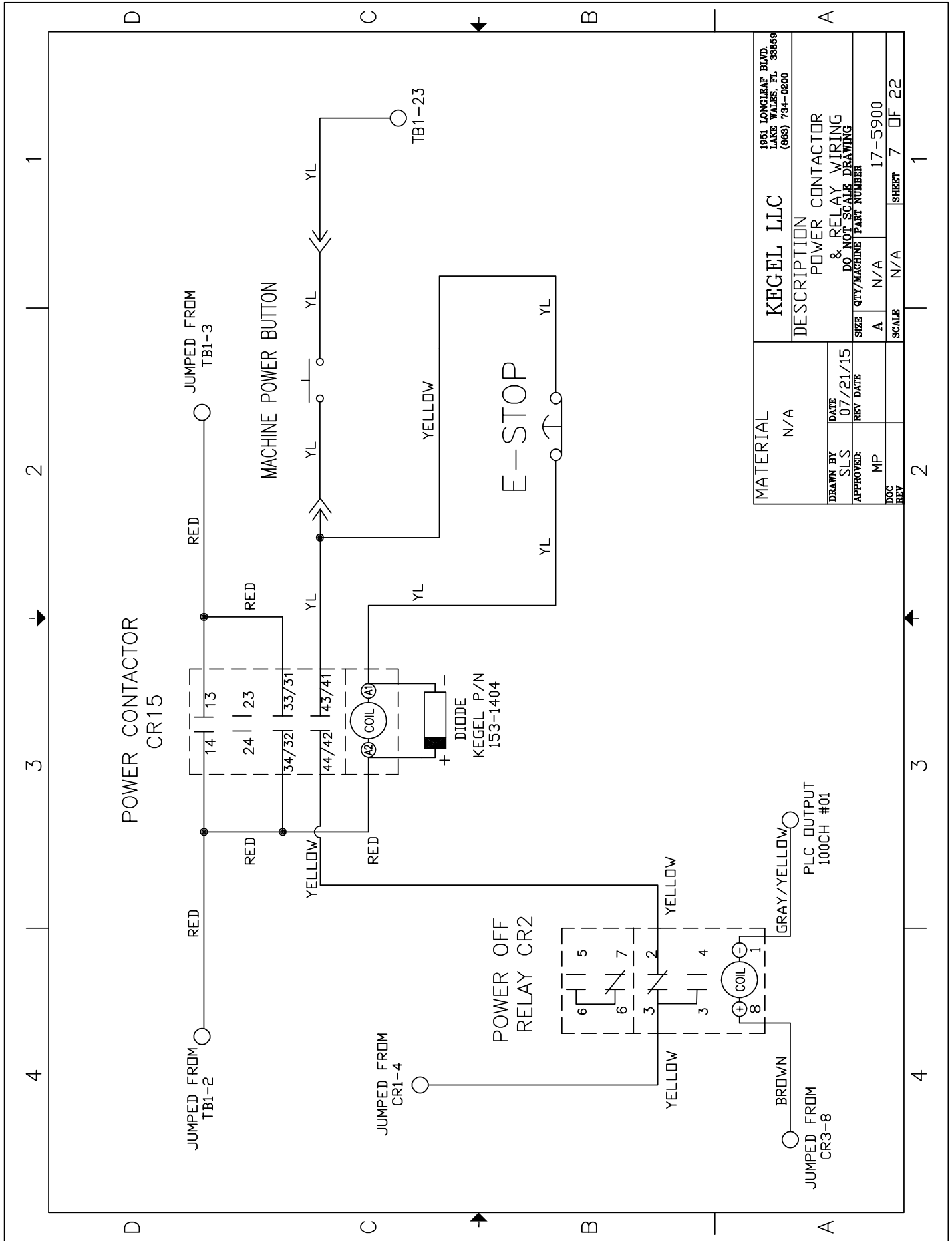
  

<b>MATERIAL</b>		KEGEL LLC
N/A		1981 LONGJUMP BLDG # 30869 (863) 794-0200
DRAWN BY	DATE	DO NOT SCALE DRAWING
SLS	07/20/15	
APPROVED:	REV DATE	SIZE QTY/MACHINE PART NUMBER
MD		C
REV		SCALE
		N/A
		SHEET 3 OF 22

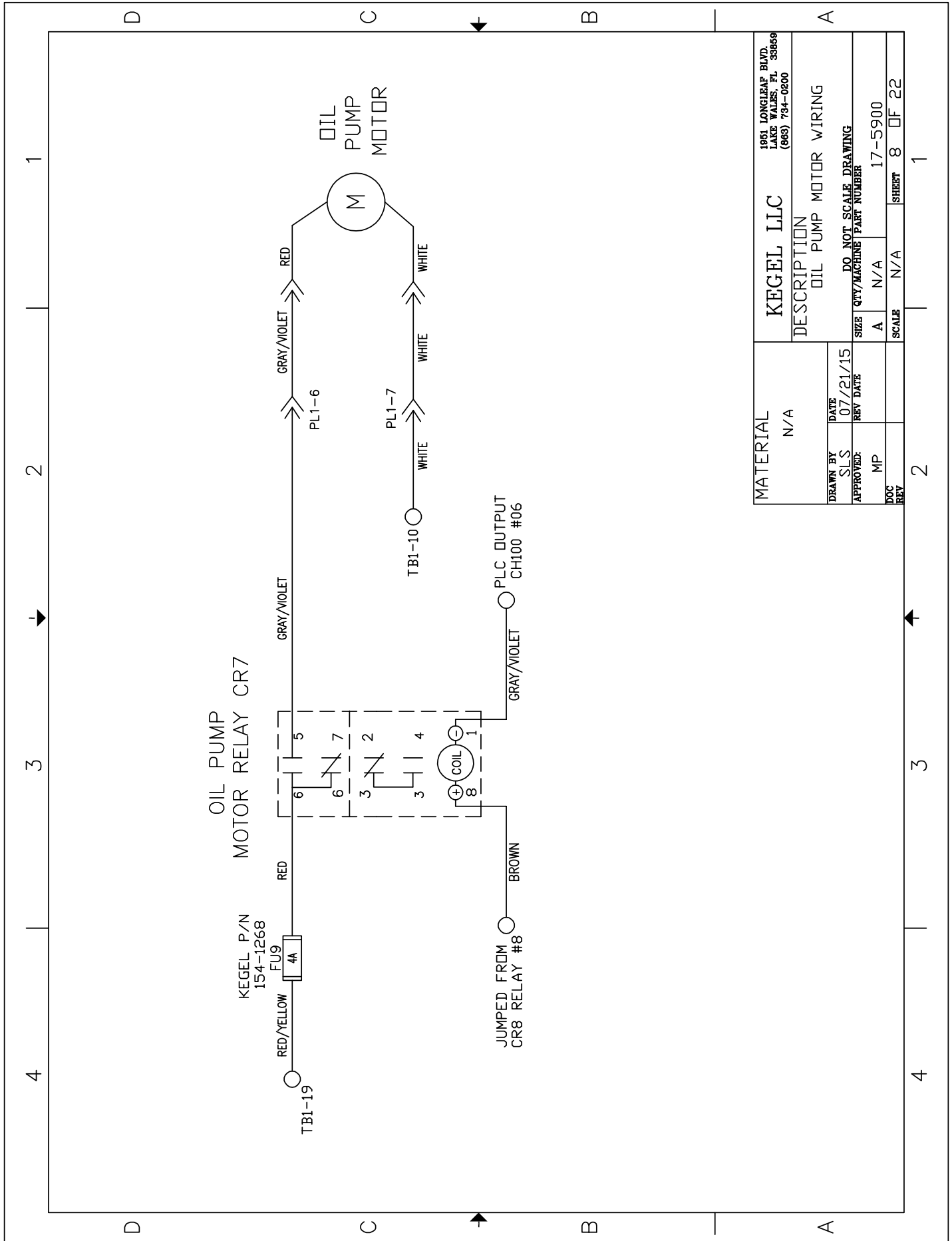






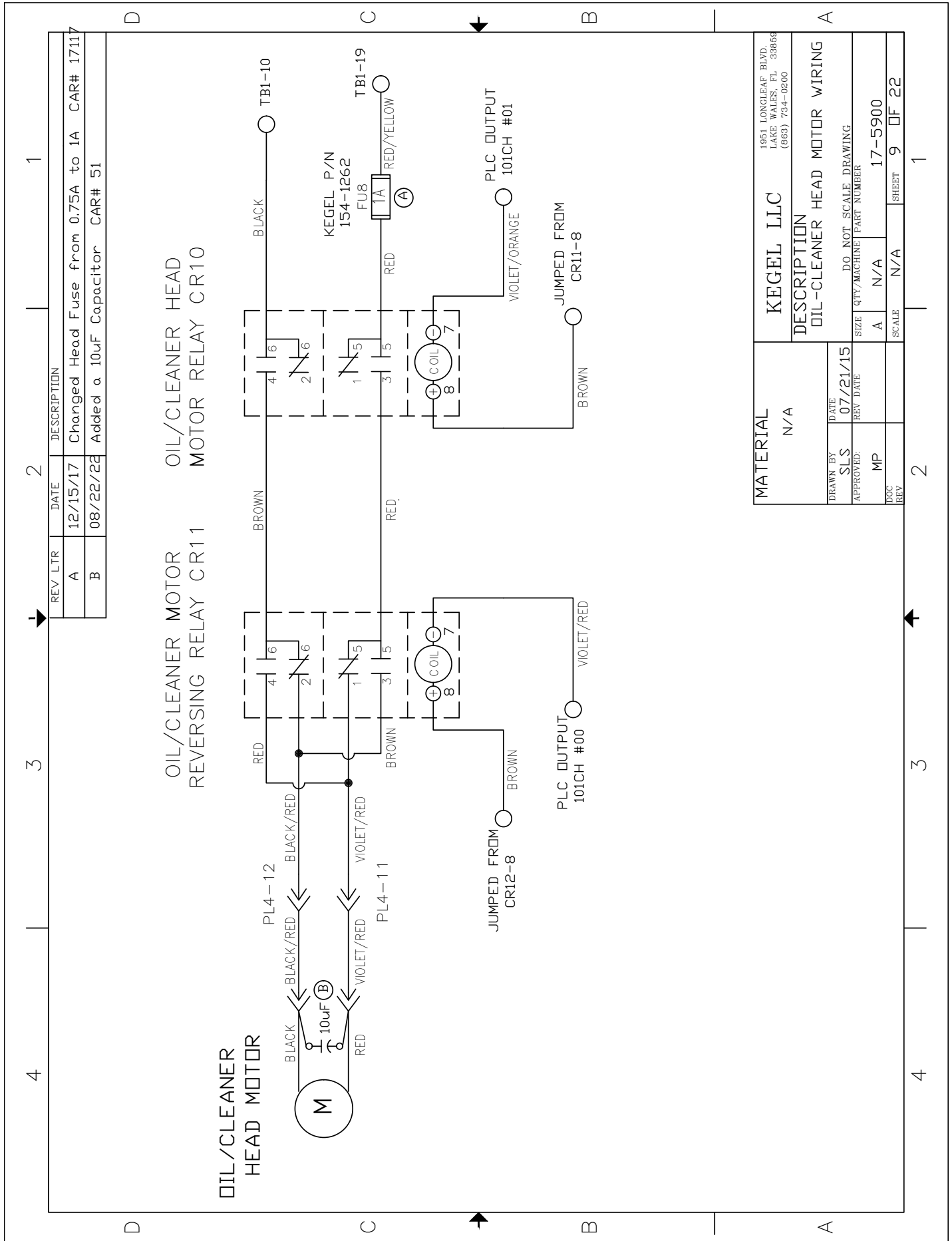


MATERIAL		N/A	
DRAWN BY	DATE	DESCRIPTION	
SLS	07/21/15	POWER CONTACTOR	
APPROVED:	REV DATE	DO NOT SCALE DRAWING	
MP		SIZE	QTY/MACHINE PART NUMBER
		A	N/A
DOC REV		SCALE	N/A
			17-5900
		SHEET	7 OF 22



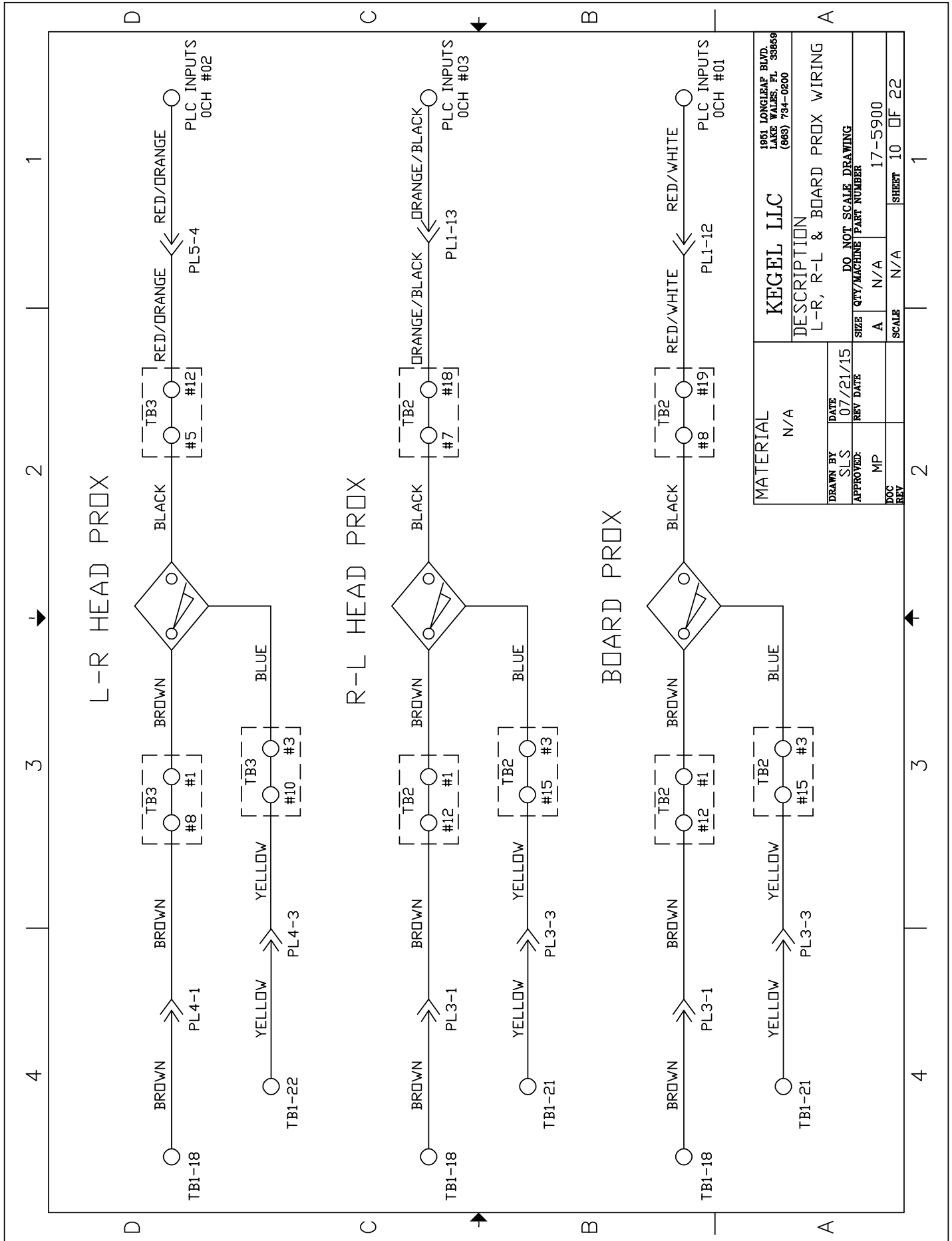
MATERIAL		KEGEL LLC		1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 784-0200	
N/A		DESCRIPTION			
		OIL PUMP MOTOR WIRING			
DRAWN BY		DATE		DO NOT SCALE DRAWING	
SLS		07/21/15		SIZE QTY/MACHINE PART NUMBER	
APPROVED:		REV DATE		A N/A 17-5900	
MP				SCALE N/A SHEET 8 OF 22	
DOC REV					





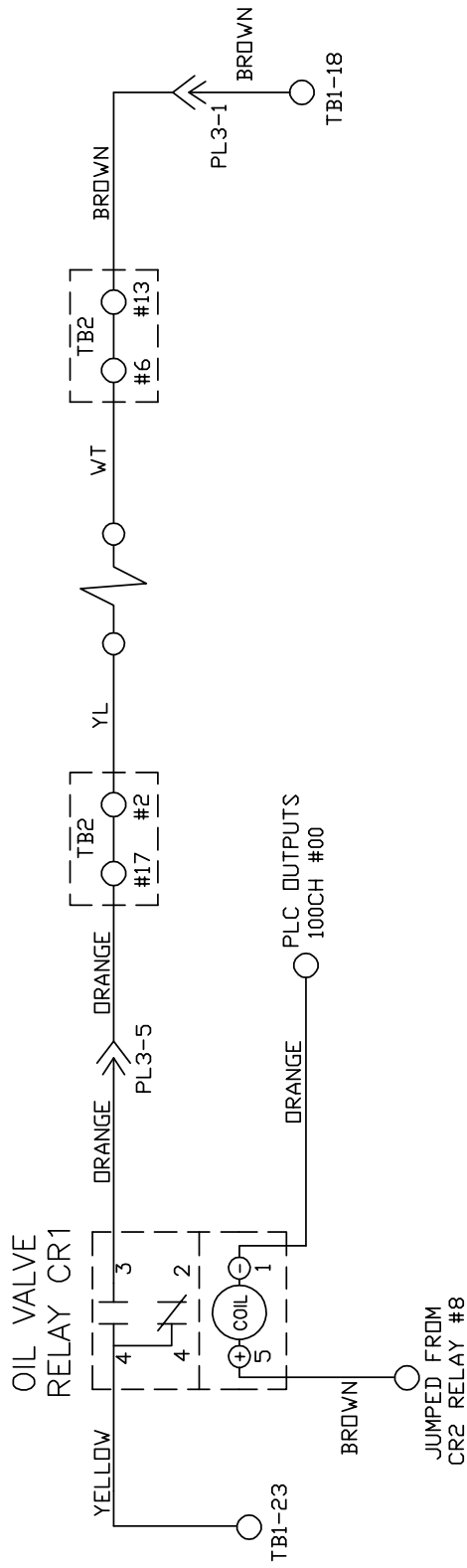
REV	L TR	DATE	DESCRIPTION
A		12/15/17	Changed Head Fuse from 0.75A to 1A CAR# 17117
B		08/22/22	Added a 10uF Capacitor CAR# 51

<b>MATERIAL</b>	N/A	<b>1951 LONGLEAF BLVD. LAKE WALES, FL 33858 (866) 734-0200</b>
<b>DESCRIPTION</b>	OIL-CLEANER HEAD MOTOR WIRING	
<b>DRAWN BY</b>	SLS	<b>DO NOT SCALE DRAWING</b>
<b>DATE</b>	07/21/15	<b>SIZE QTY/MACHINE PART NUMBER</b>
<b>APPROVED:</b>	MP	A N/A 17-5900
<b>DOC REV</b>		SCALE N/A SHEET 9 OF 22



MATERIAL		N/A	
1951 LONGLEAF BLVD. LAKE WALES, FL 33669 (866) 784-0200			
KEGEL LLC			
DESCRIPTION			
L-R, R-L & BOARD PROX WIRING			
DO NOT SCALE DRAWING			
SIZE	QTY/MACHINE	PART NUMBER	
A	N/A	17-5900	
SCALE	N/A	SHEET	10 OF 22

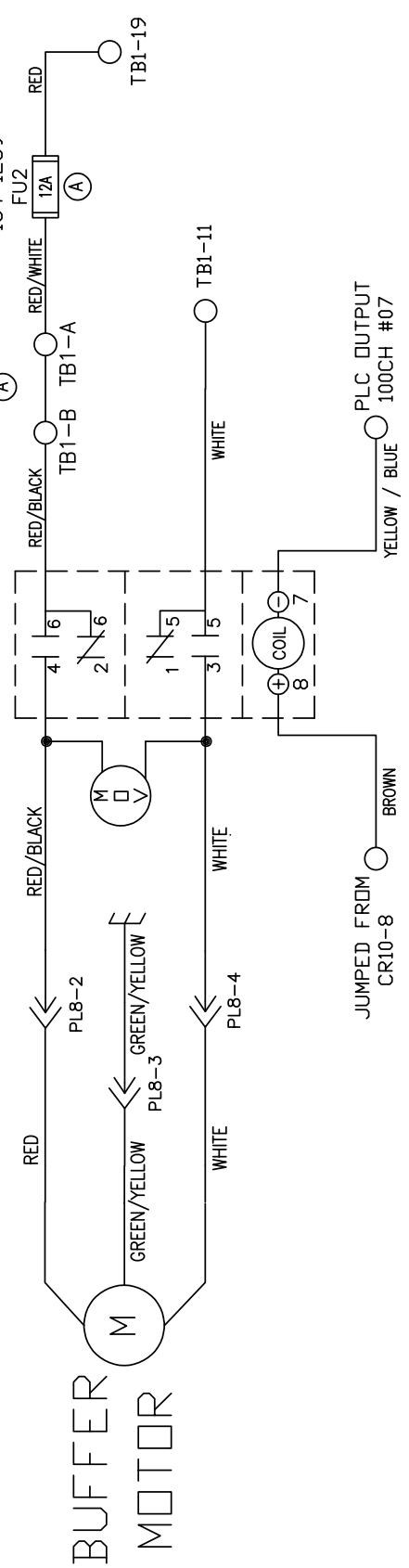
# OIL VALVE



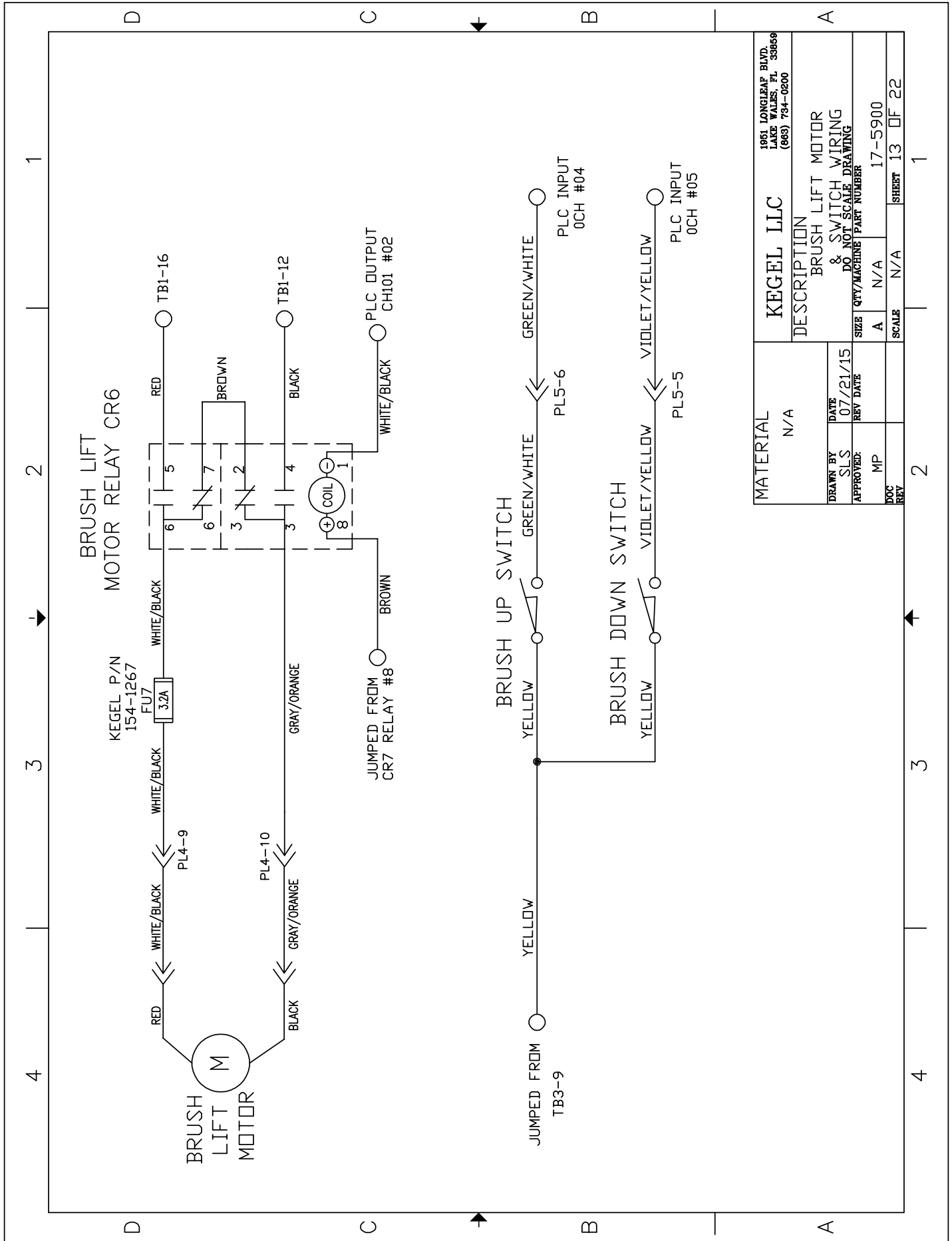
MATERIAL		KEGEL LLC		1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 784-0200	
DESCRIPTION		OIL VALVE RELAY WIRING			
DO NOT SCALE DRAWING	DATE	07/21/15			
DO NOT SCALE DRAWING	REV DATE				
DO NOT SCALE DRAWING	SIZE	A	QTY/MACHINE	N/A	PART NUMBER
DO NOT SCALE DRAWING	SCALE	A	N/A	N/A	17-5900
DO NOT SCALE DRAWING	REV		SCALE	N/A	SHEET 11 OF 22

REV LTR	DATE	DESCRIPTION
A	4/27/23	ADDED NEW WIRE COLORS AND FUSE CAR# 105

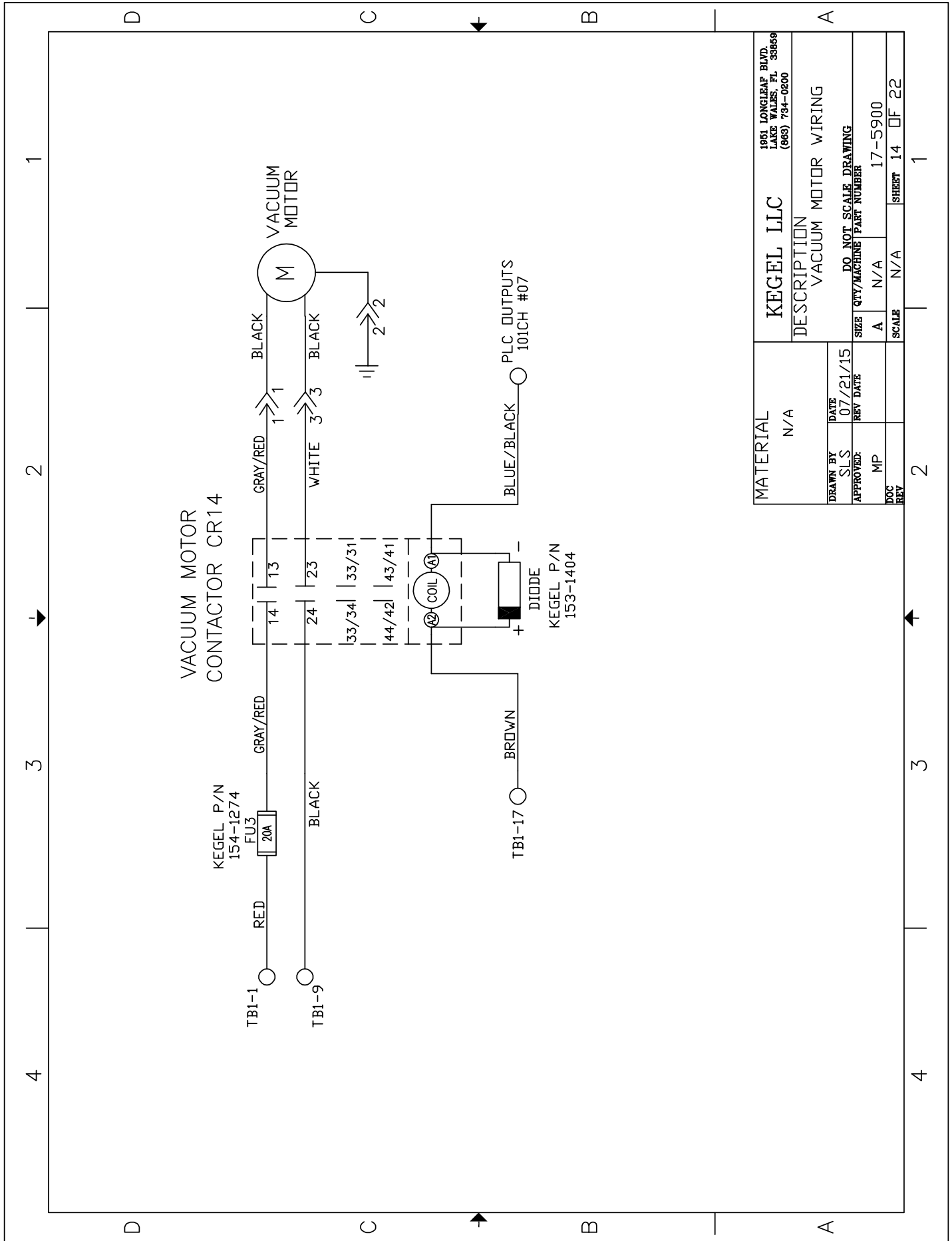
BUFFER MOTOR RELAY CR9



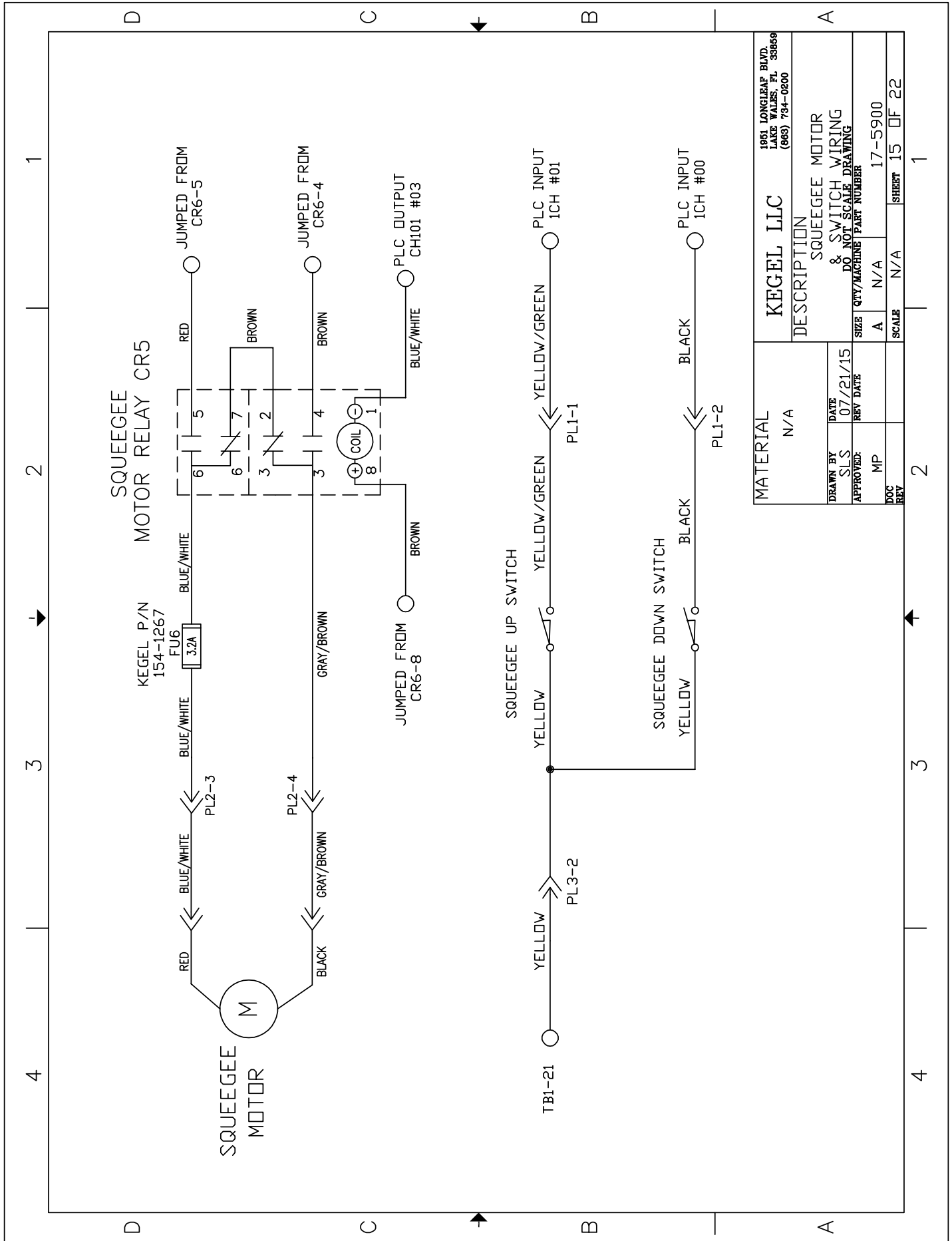
MATERIAL	N/A	1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 784-0200
DESCRIPTION	BUFFER MOTOR WIRING	
DRAWN BY	DATE	DO NOT SCALE DRAWING
SLS	07/21/15	SIZE QTY/MACHINE / PART NUMBER
APPROVED:	REV DATE	A N/A 17-5900
MD		SCALE N/A SHEET 12 OF 22
DOC REV		



MATERIAL		N/A	
DESCRIPTION		BRUSH LIFT MOTOR & SWITCH WIRING	
DATE	07/21/15	DO NOT SCALE DRAWING	
APPROVED:	MP	SIZE	QTY/MACHINE PART NUMBER
DOC REV		A	N/A
		SCALE	N/A
		SHEET	13 OF 22

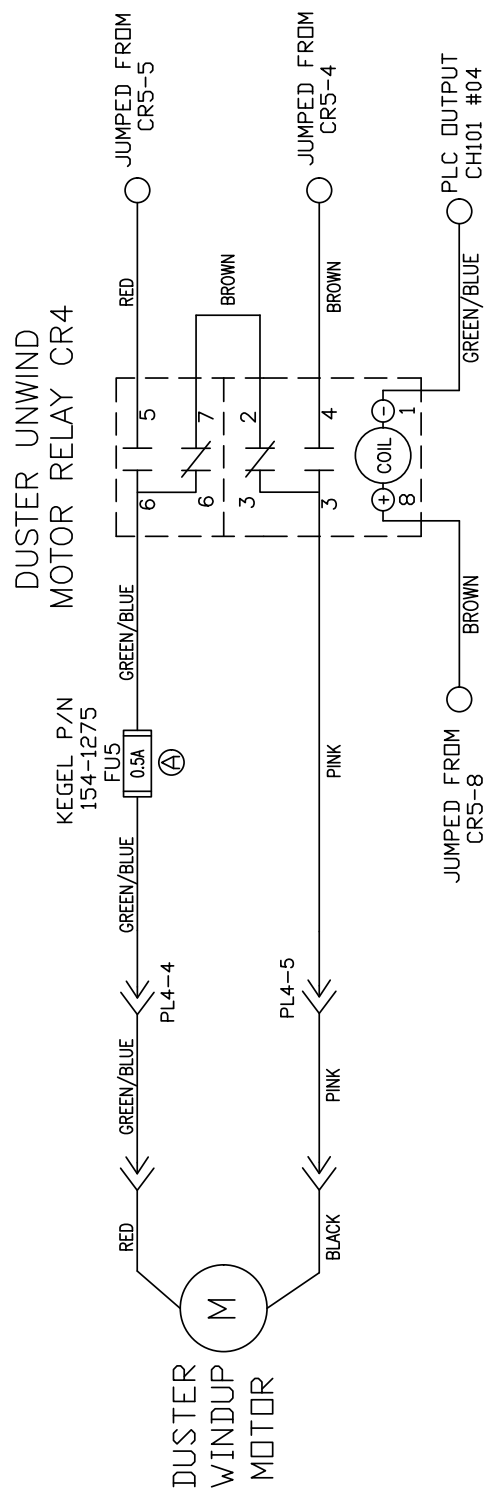


MATERIAL	N/A	1951 LONGLEAF BLVD. LAKE WALES, FL 33669 (866) 784-0200
DESCRIPTION	VACUUM MOTOR WIRING	
DRAWN BY	DATE	DO NOT SCALE DRAWING
SLS	07/21/15	SIZE QTY/MACHINE PART NUMBER
APPROVED:	REV DATE	A N/A 17-5900
MP		SCALE N/A SHEET 14 OF 22
DOC REV		



4 | 3 | 2 | 1

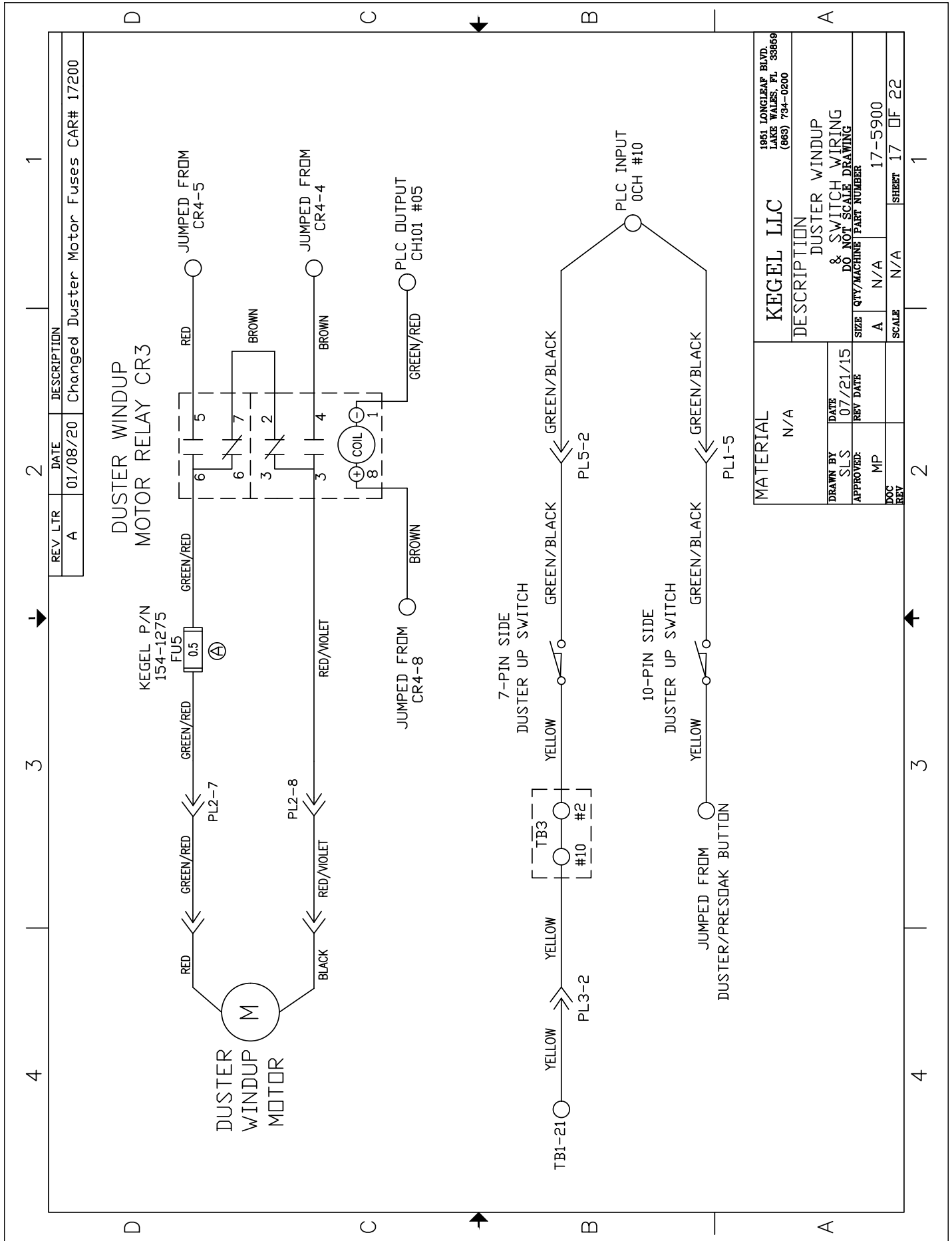
REV	LTR	DATE	DESCRIPTION
A		01/08/20	Changed Duster Motor Fuses CAR# 17200



<b>MATERIAL</b> N/A		<b>KEGEL LLC</b> 1954 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 734-0200	
<b>DRAWN BY</b> SLS	<b>DATE</b> 07/21/15	<b>DESCRIPTION</b> DUSTER UNWIND MOTOR WIRING DO NOT SCALE DRAWING	
<b>APPROVED:</b> MP	<b>REV DATE</b>	<b>SIZE</b> A	<b>QTY/MACHINE PART NUMBER</b> N/A
<b>DOC REV</b>		<b>SCALE</b> N/A	<b>17-5900</b>
		<b>SHEET</b> 16	<b>OF</b> 22

4 | 3 | 2 | 1

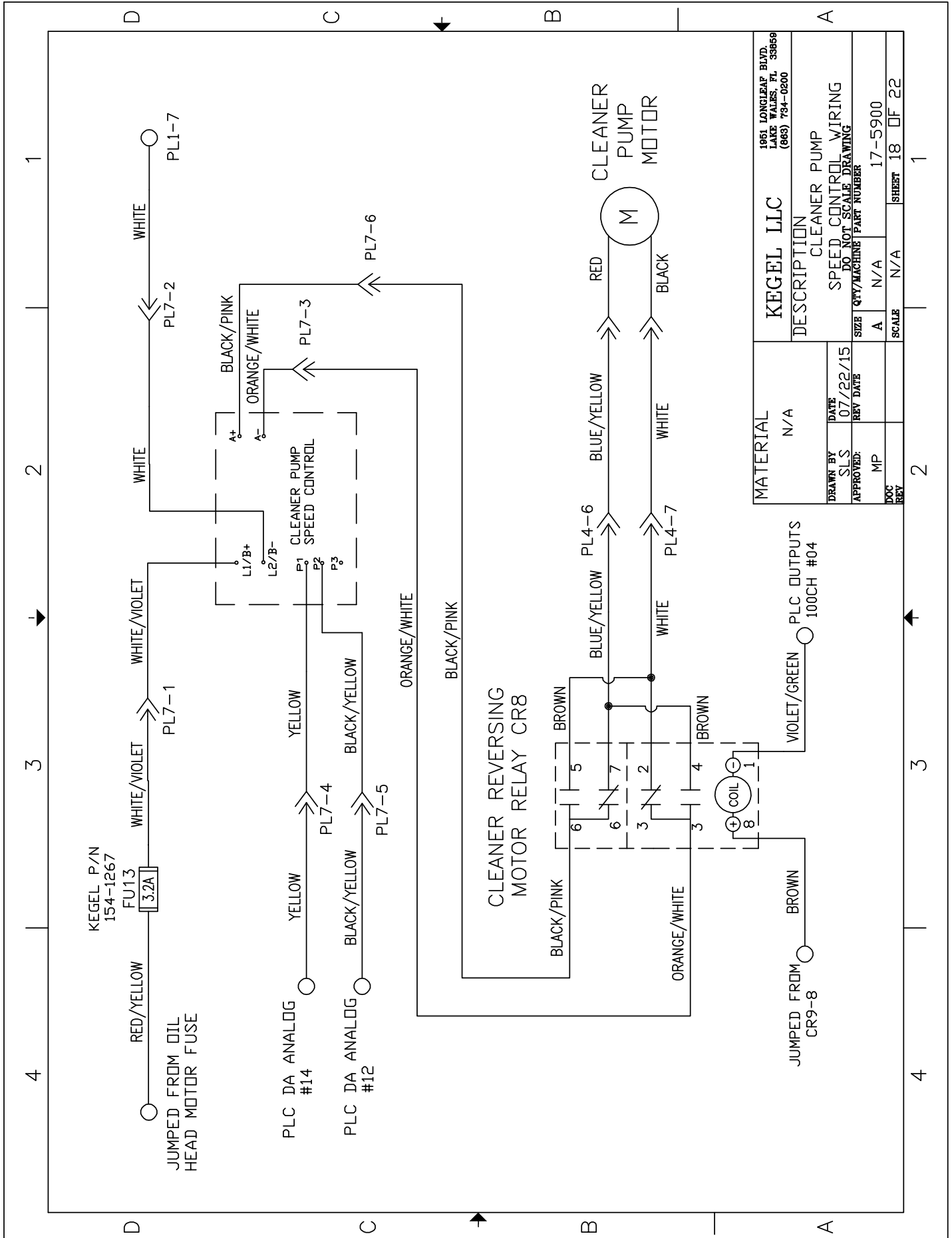




REV LTR		DATE	DESCRIPTION
A		01/08/20	Changed Duster Motor Fuses CAR# 17200

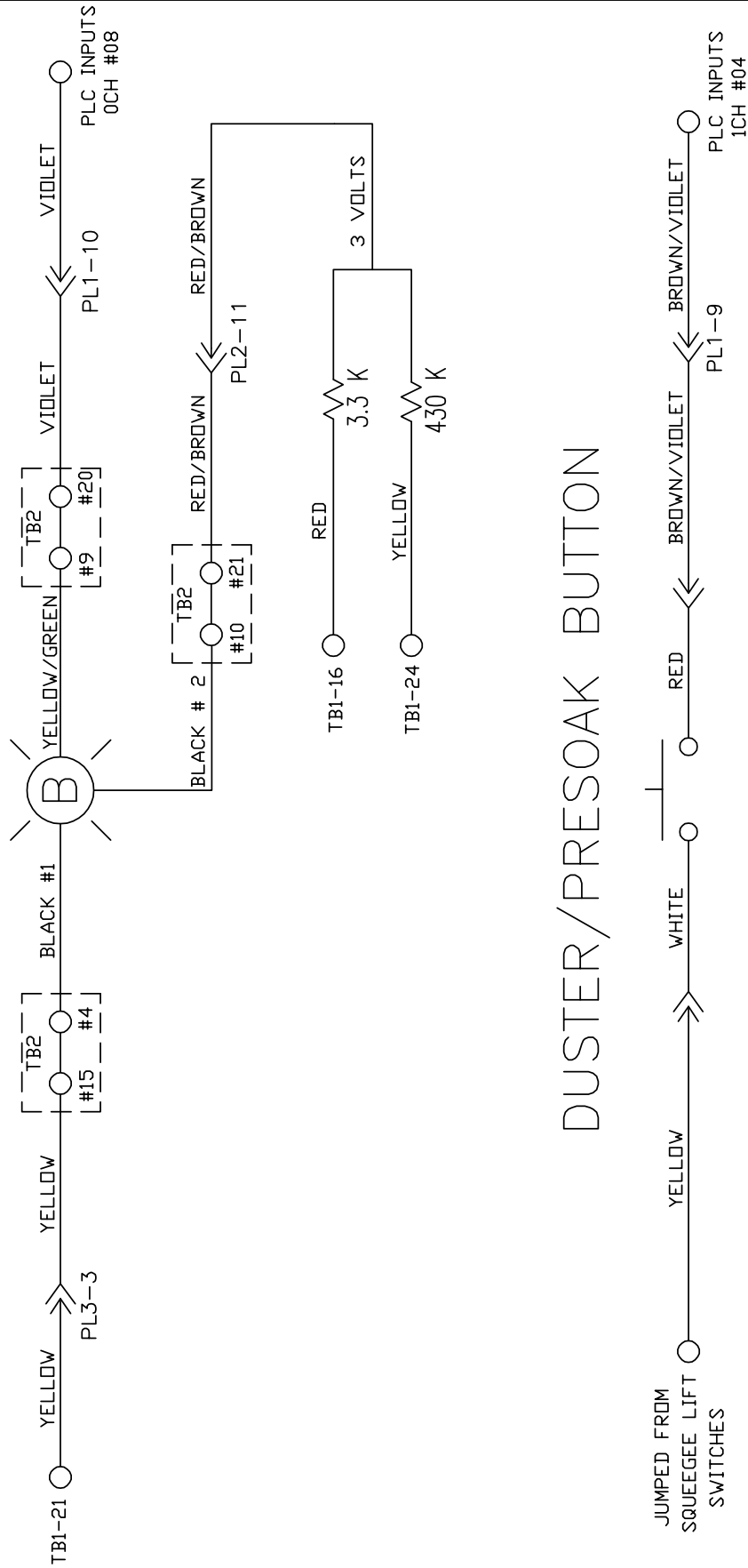
  

MATERIAL		KEGEL LLC	
N/A		1951 LONGLEAF BLVD. LAKE WALES, FL 33869 (888) 784-0200	
DESCRIPTION		DUSTER WINDUP	
DRAWN BY		DATE	
SLS		07/21/15	
APPROVED:		DO NOT SCALE DRAWING	
MP		SIZE QTY/MACHINE PART NUMBER	
A		N/A N/A 17-5900	
DOC REV		SCALE N/A SHEET 17 OF 22	

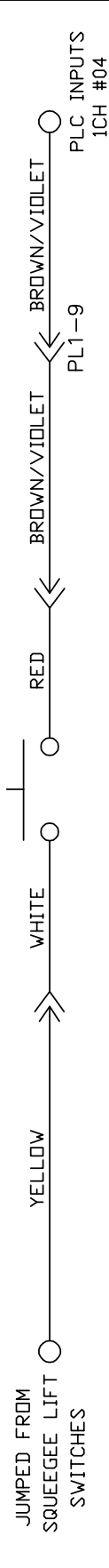


MATERIAL		KEGEL LLC		1951 LONGLEAF BLVD. LAKE WALES, FL 33669 (866) 794-0200	
N/A		DESCRIPTION		CLEANER PUMP	
DRAWN BY	DATE	SPEED CONTROL WIRING		DO NOT SCALE DRAWING	
SLS	07/22/15	SIZE	QTY/MACHINE	PART NUMBER	
APPROVED:	MP	A	N/A	17-5900	
DOC REV		SCALE	N/A	SHEET	18 OF 22

# START BUTTON



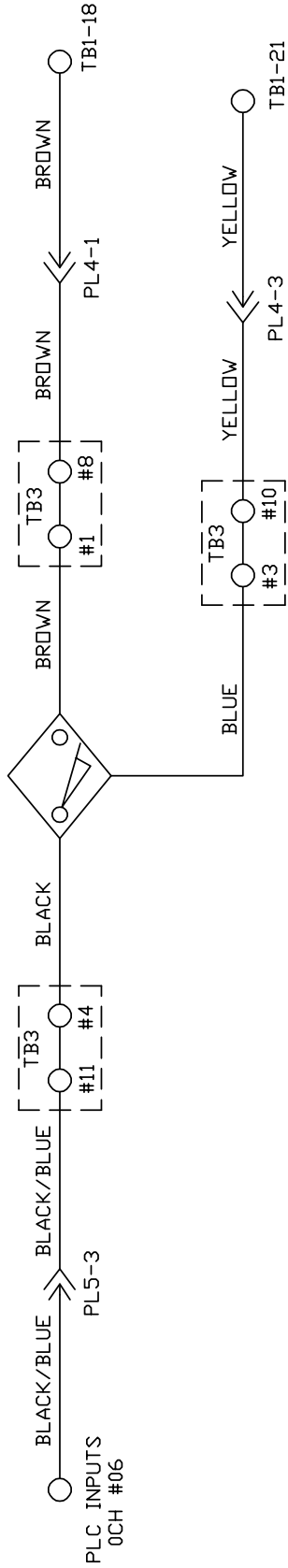
# DUSTER/PRESOAK BUTTON



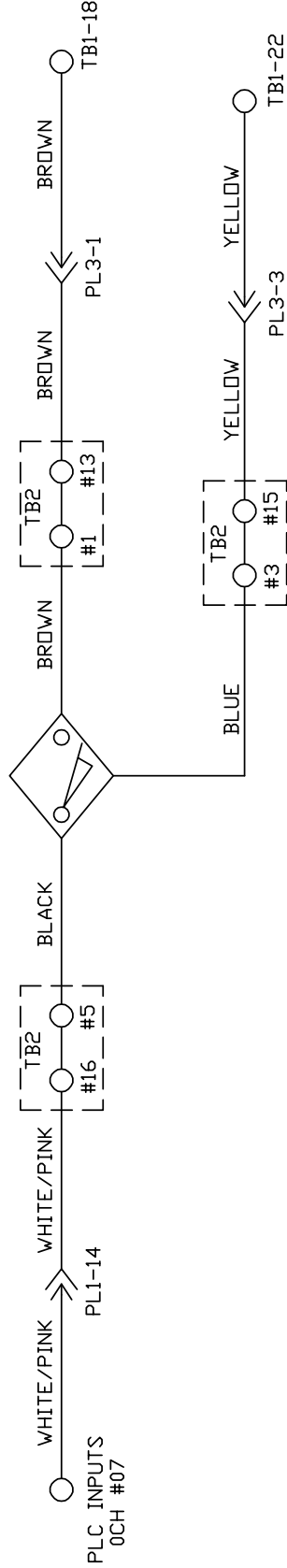
MATERIAL N/A		1951 LONGLEAF BLVD. LAKE WALES, FL 33669 (866) 794-0200	
DESCRIPTION START BUTTON & DUSTER/PRESOAK BUTTON DO NOT SCALE DRAWING		SIZE QTY/MACHINE PART NUMBER A N/A 17-5900	
DRAWN BY SLS	DATE 07/22/15	SCALE N/A	SHEET 19 OF 22
APPROVED: MP	REV DATE		
DOC REV			



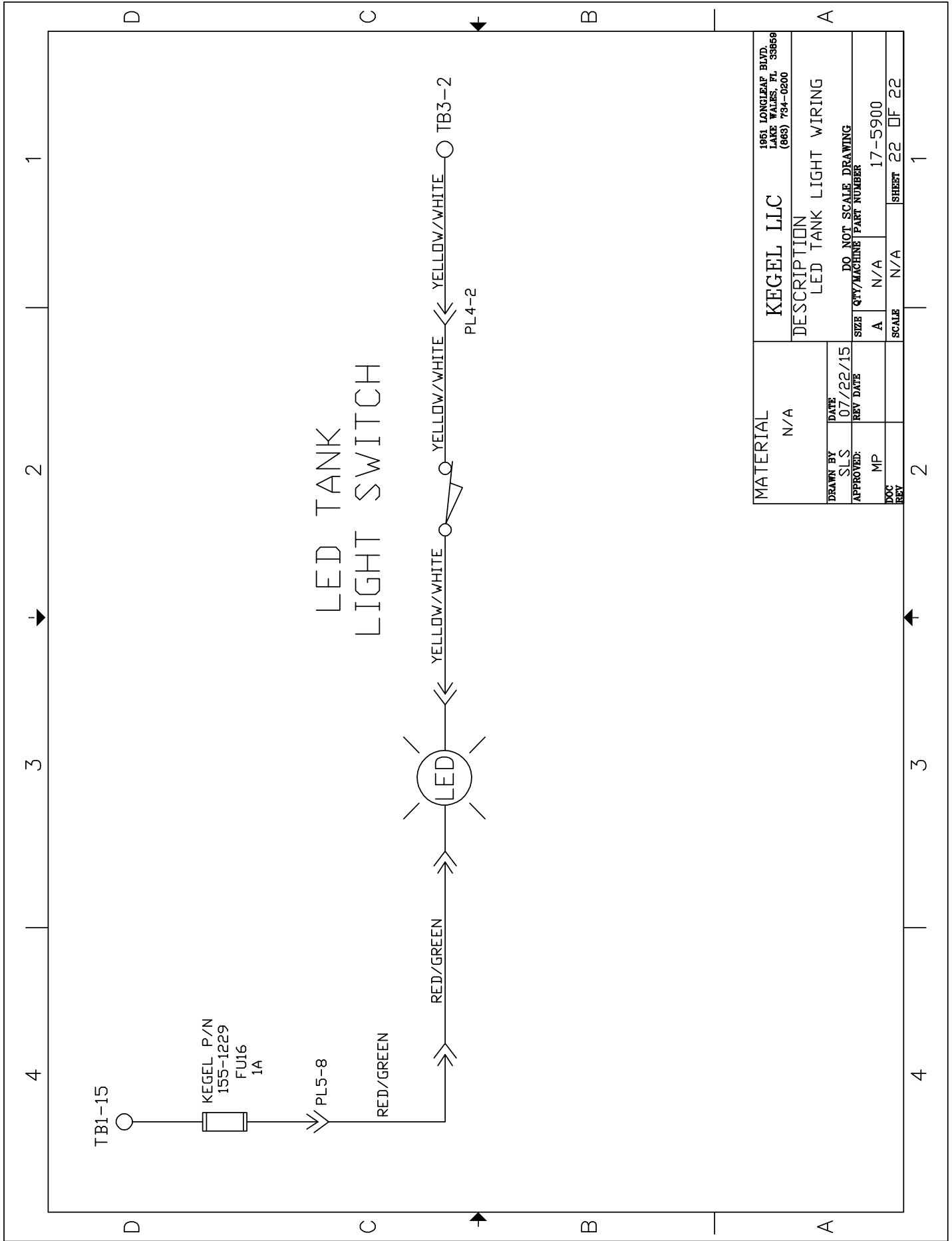
# SPEED TACH PROX



# LANE DISTANCE PROX



MATERIAL		1951 LONGLEAF BLVD. LAKE WALES, FL 33669 (866) 784-0200	
N/A		KEGEL LLC	
DESCRIPTION			
SPEED TACH &			
LANE DISTANCE WIRING			
DO NOT SCALE DRAWING			
DRAWN BY	DATE	SIZE	QTY/MACHINE PART NUMBER
SLS	07/22/15	A	N/A
APPROVED:	MP	SCALE	N/A
DOC REV			17-5900
			SHEET 21 OF 22



MATERIAL		KEGEL LLC		1951 LONGLEAF BLVD. LAKE WALES, FL 33669 (868) 794-0200	
N/A		DESCRIPTION			
LED TANK LIGHT WIRING				DO NOT SCALE DRAWING	
DRAWN BY	DATE	SIZE	QTY/MACHINE	PART NUMBER	
SLS	07/22/15	A	N/A	17-5900	
APPROVED:	REV DATE	SCALE	N/A	SHEET	22 OF 22
MP					
DOC REV					

