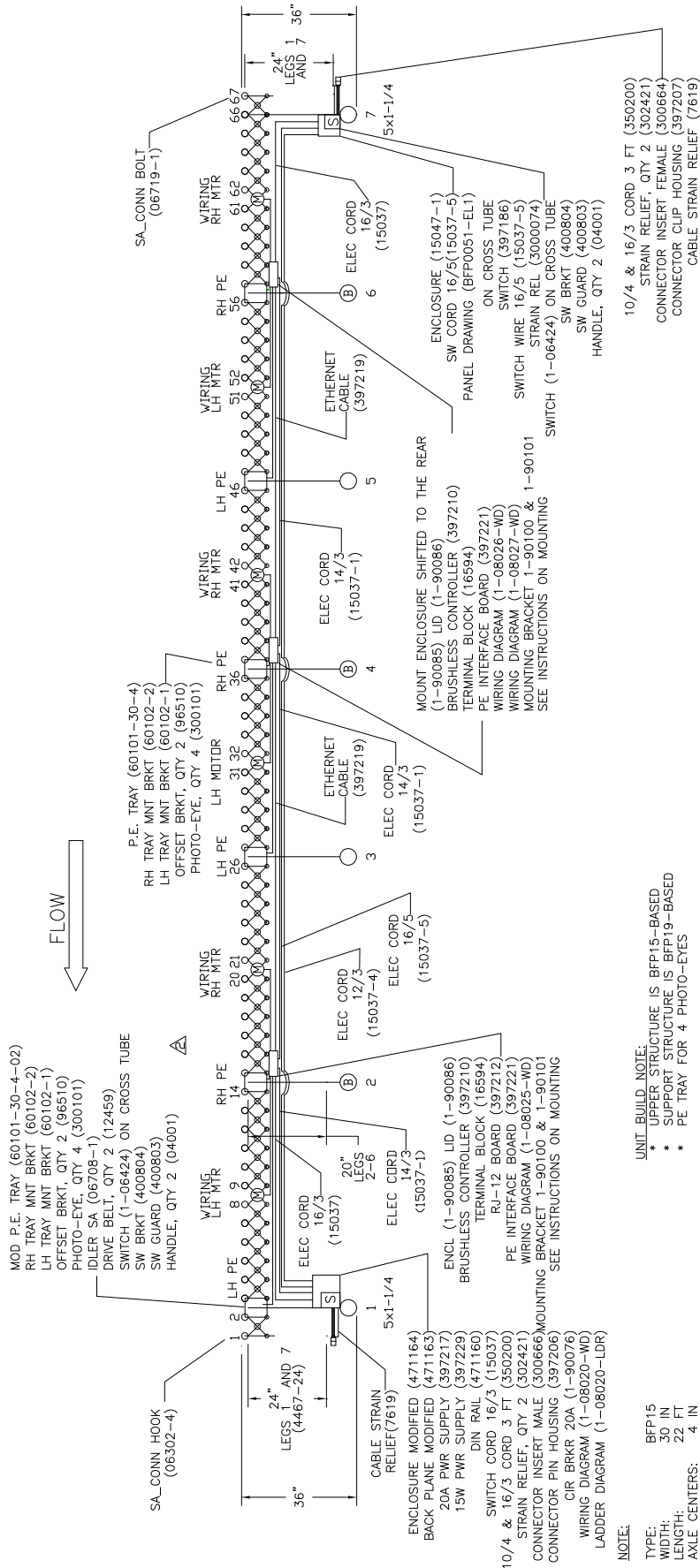




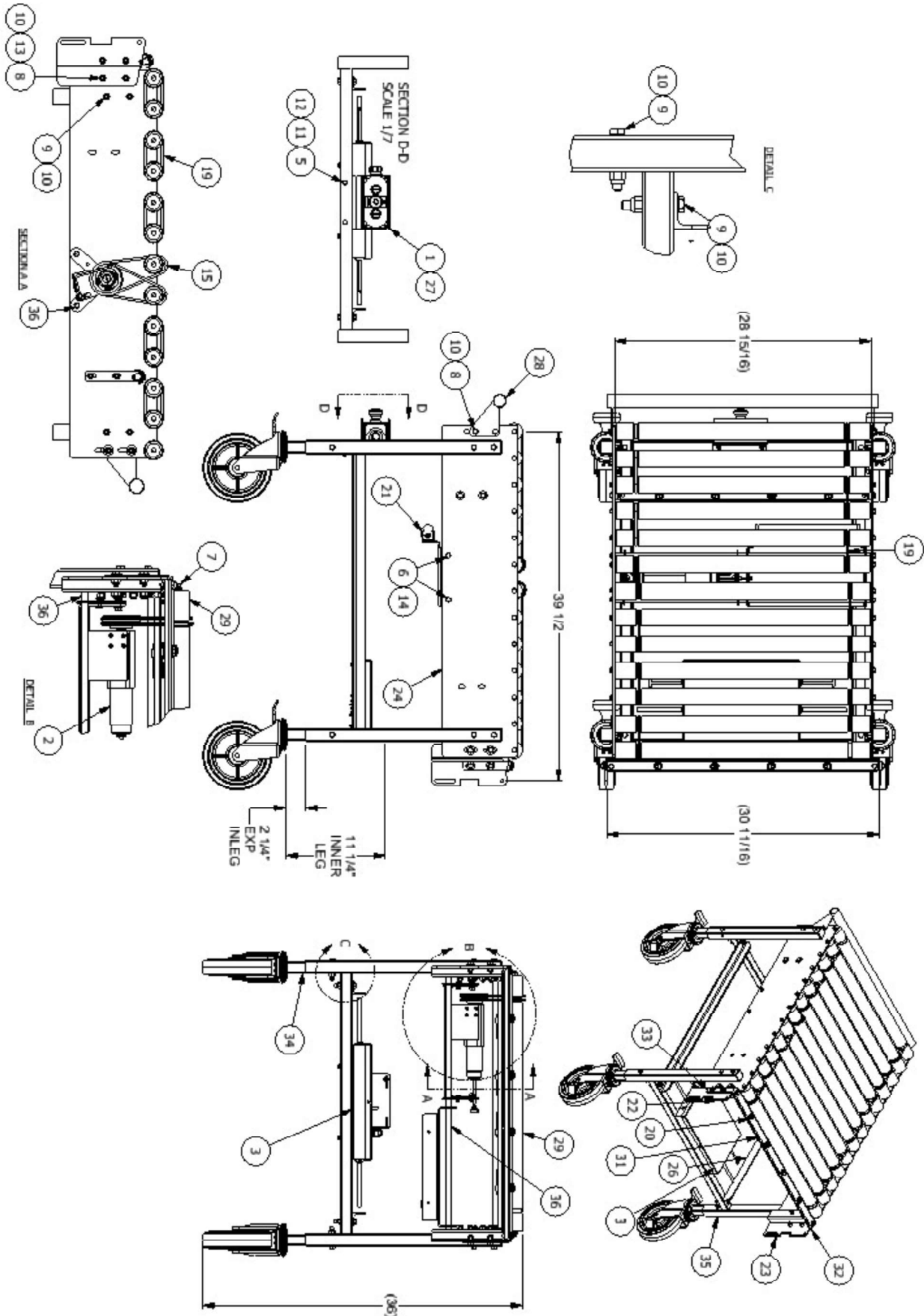
# BFP0051

## BFP15-30-22-4



# RIC-0002

## RIGID IMPACT CART (ON INFEED OF BFP0050)



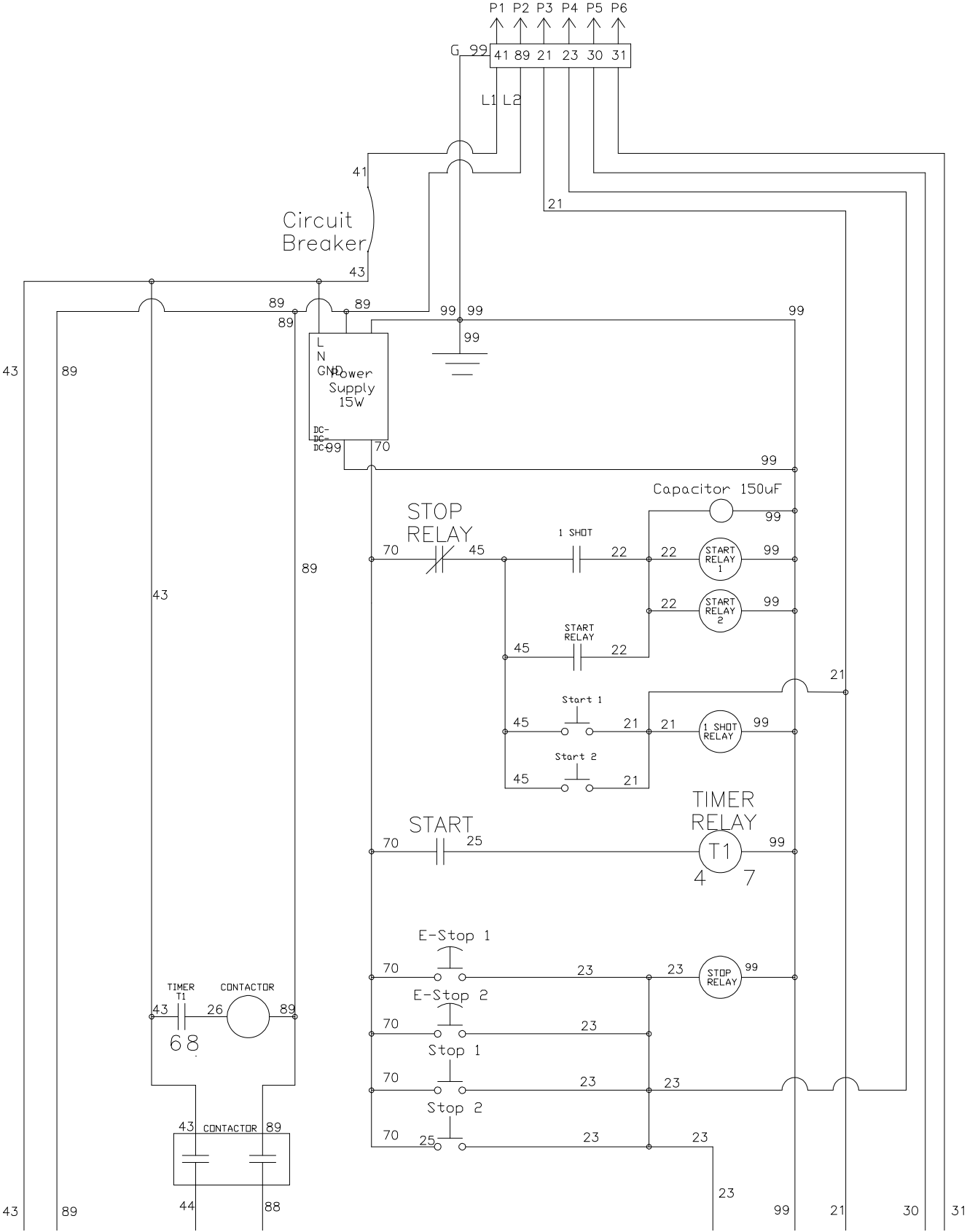
# RIC-0002

## RIGID IMPACT CART (PARTS LIST)

<u>ITEM</u>	<u>QTY</u>	<u>NAME</u>	<u>DESCRIPTION</u>	<u>ITEM</u>	<u>QTY</u>	<u>NAME</u>	<u>DESCRIPTION</u>
1	1	1-06424	A_SWITCH_START STOP/ESTOP_UL	19	11	300058	BELT .210X9-7/8 85A
2	1	1-07068	A KIT MOTOR DC BRUSHLESS	20	8	300101	DC PHOTO EYE BANNER
3	1	1-08025	A_DC BRUSHLESS CONTROLLER END ZONE	21	1	397218	LED LIGHT BAR 24VDC
4	1	1-90055	COMM CABLE 26-8 (NOT SHOWN ON DWG)	22	1	4000685	CONN BRKT, RH, BFP/BFR
5	2	10015	BOLT,HEX,1/4-20X1-3/4	23	1	4000686	CONN BRKT, LH, BFP/BFR
6	4	10025	BOLT,HEX,5/16-18X5/8	24	2	4000870	SIDE PLATE_RIGID CART
7	26	10026	BOLT,HEX,5/16-18X3/4	25	1	4001054	LIGHT MNT BRKT_BFP
8	18	10042	BOLT,HEX,3/8-16X1	26	2	400114	Side Brace, Rigid Cart
9	16	10052-1	BOLT,HEX,3/8-16X2-1/4	27	1	400804	CONTROL ENCL. MOUNT
10	34	11140	NUT,NYLOCK,3/8-16	28	1	43010	A_HANDLE_RIGID-CART_30 WIDE
11	2	11495	NUT,NYLOCK JAM,1/4-20	29	13	50099-30	Roller 1.90 X 30 PF
12	2	12000	WASHER,FLAT,1/4	30	1	60101-28-4	TRAY_PHO-EYE MNT_30 W_4 HOLE PREP
13	16	12020	WASHER,FLAT,3/8	31	1	60101-30-4	TRAY_PHO-EYE MNT_30 W_4 HOLE PREP
14	30	12125	WASHER,LOCK,5/16	32	2	60102-1	Brkt. Photo-Eye Tray Mnt LH & RH
15	2	12466	Belt,Drive	33	2	60102-2	Brkt. Photo-Eye Tray Mnt LH & RH
16	4	14071	LEG CAP 1-1/2 SQ 14 GA	34	4	6172-105	A_ILLEG_1-1/4 X 11-1/4_8 X 2 B
17	6 FT	15037-1	ELEC CORD 14/3 (NOT SHOWN ON DWG)	35	2	7300250	W_UPPER LEG_RGD CART_30 W X 22 LG
18	11	300058	ROLLER DRIVE BELT	36	2	95037-30	AXLE, PF 30"

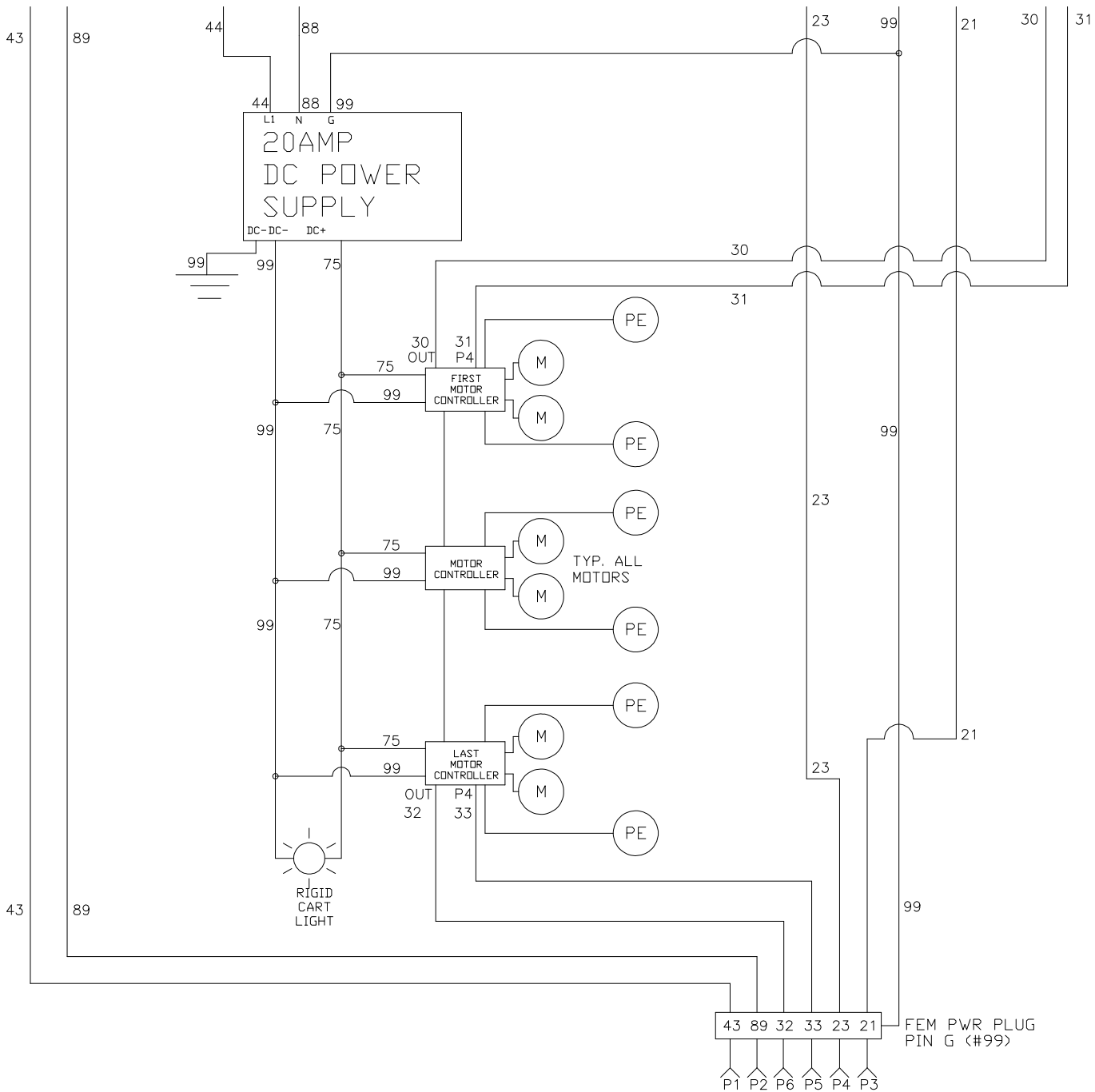
# 1-08020-LDR

## LADDER DIAGRAM - BFP0051, pg. 1 of 2



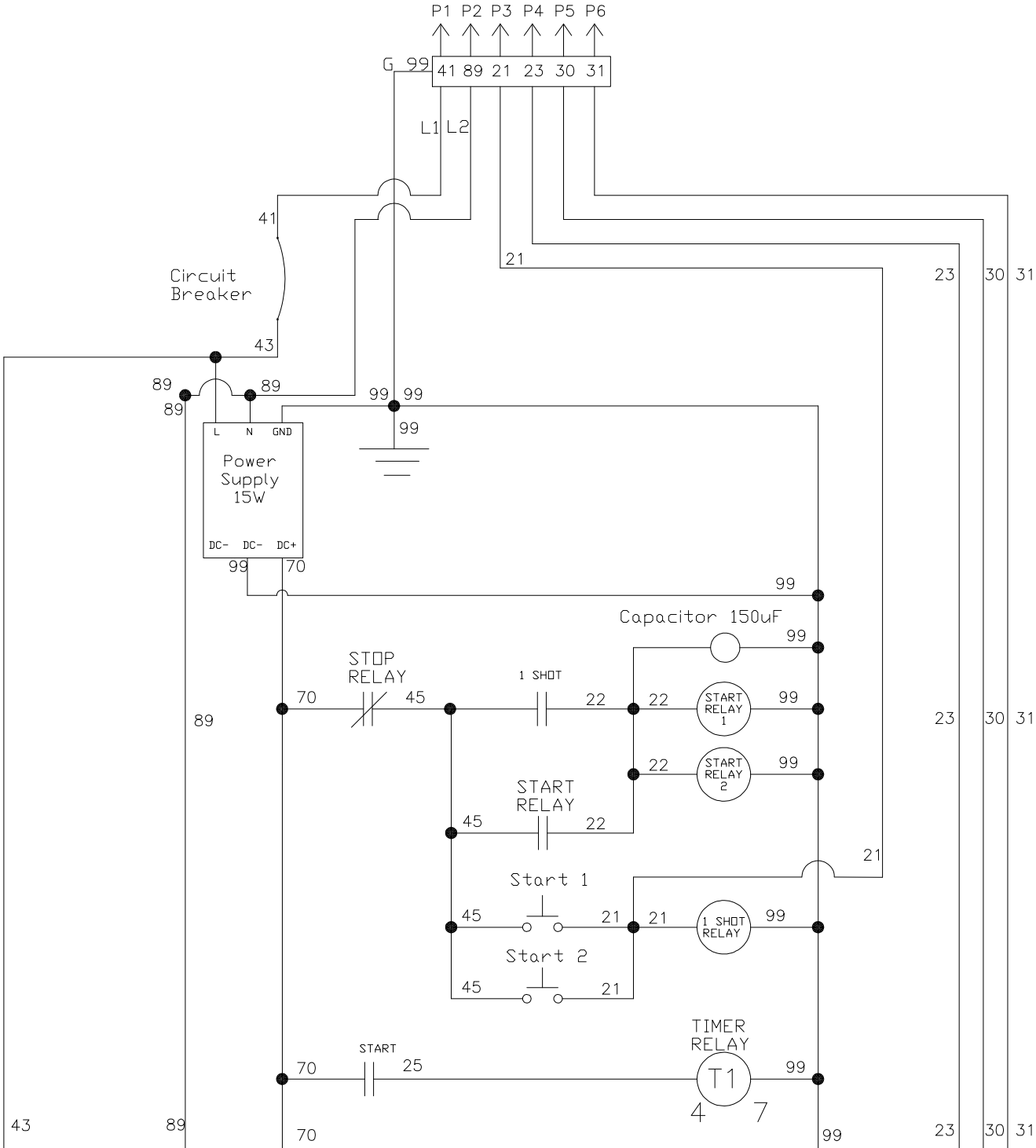
# 1-08020-LDR

## LADDER DIAGRAM - BFP0051, pg. 2 of 2



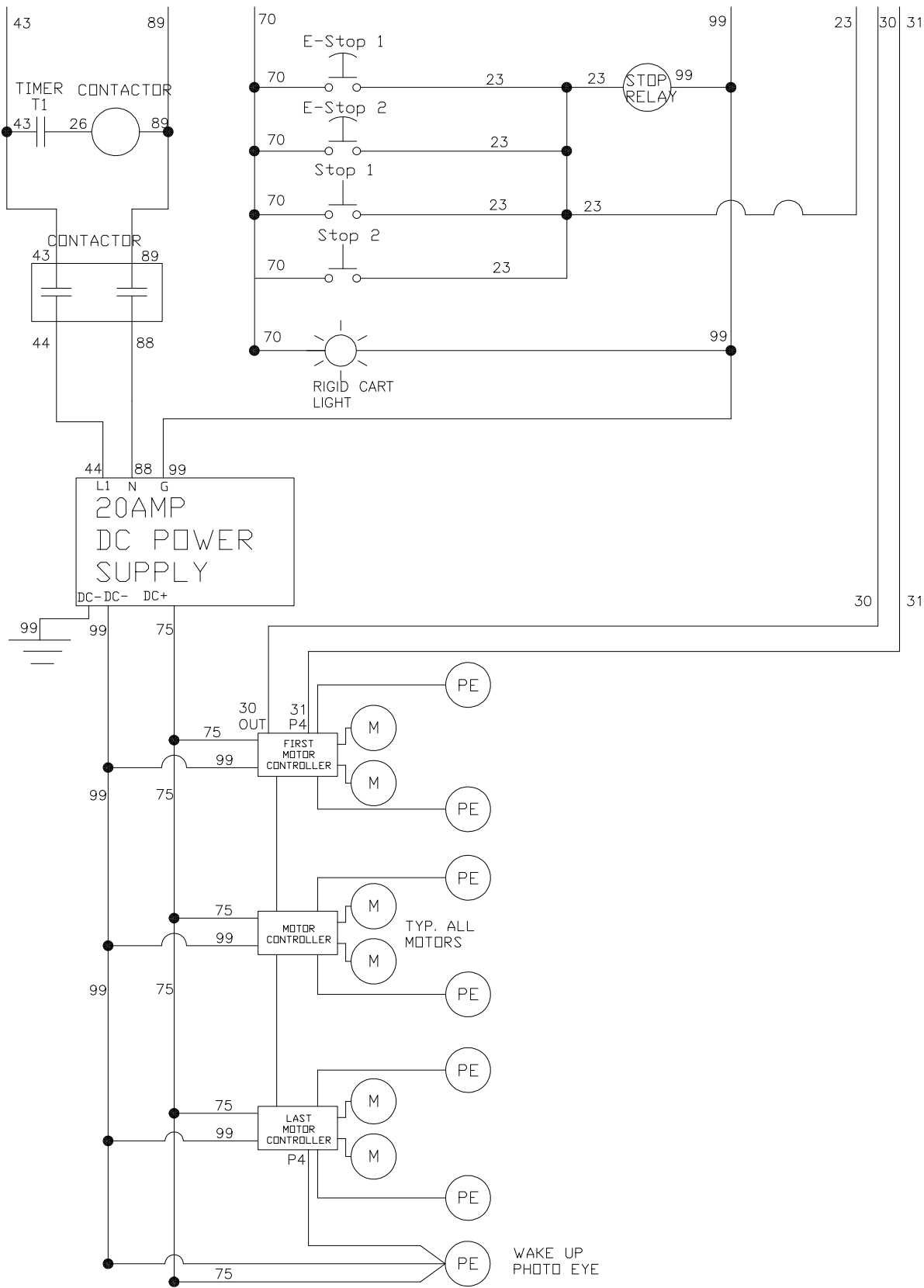
# 1-08022-LDR

## LADDER DIAGRAM - BFP0050, pg. 1 of 2



# 1-08022-LDR

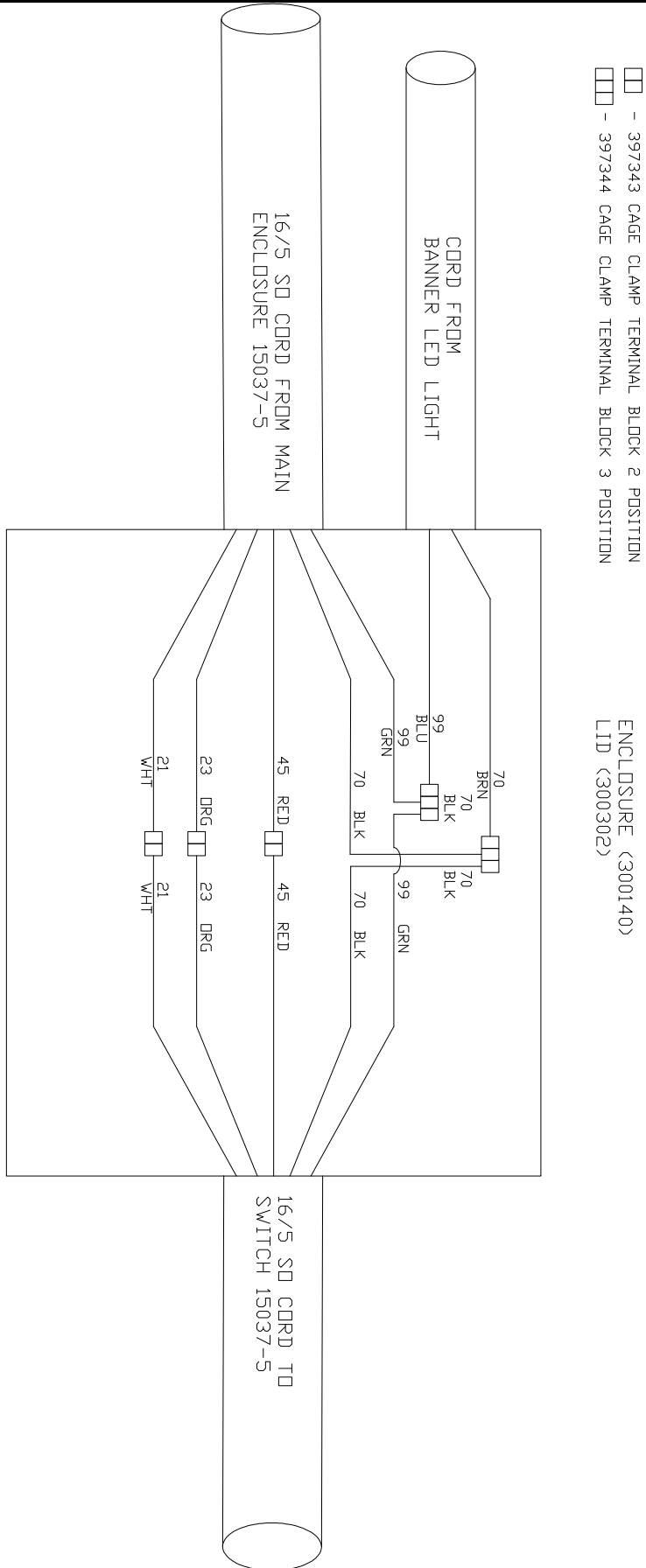
## LADDER DIAGRAM - BFP0050, pg. 2 of 2





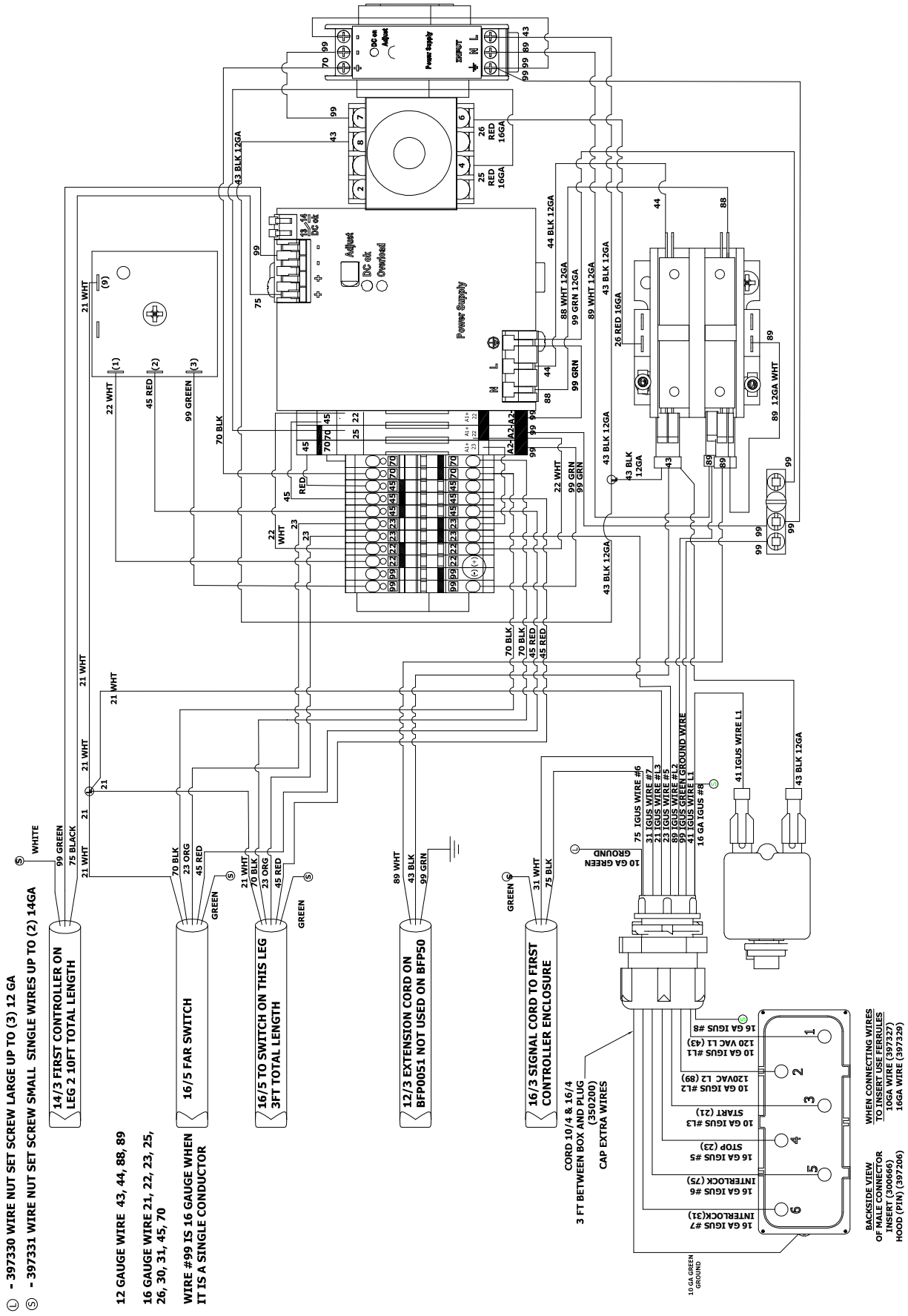
# BFP0050-EL1

## 4X4 JUNCTION BOX SWITCH & LIGHT ON RIGID CART-WIRING DIAGRAM



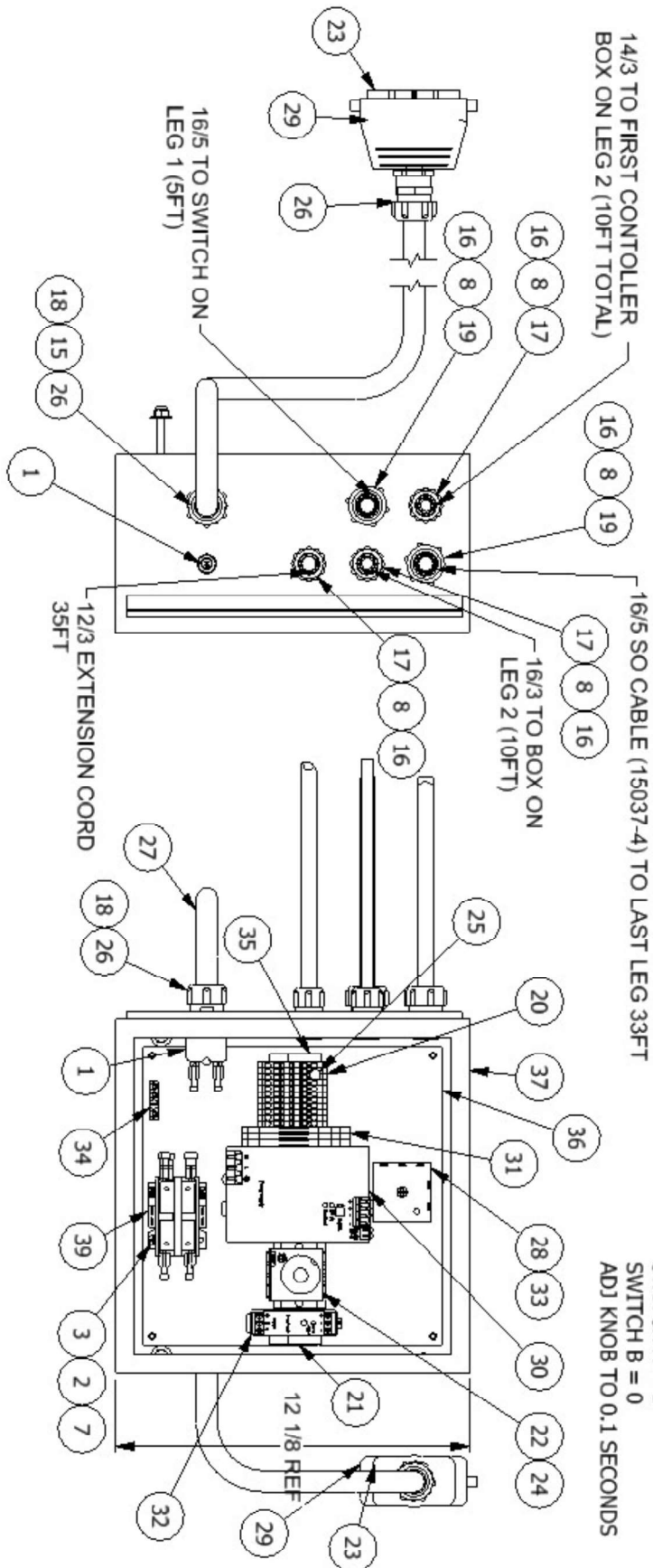
# BFP0051-EL1

## BFP0051-EL1\_INTERFACE BOX\_20A SVC\_REC ACCUM\_WIRING DIAGRAM



# 1-08020

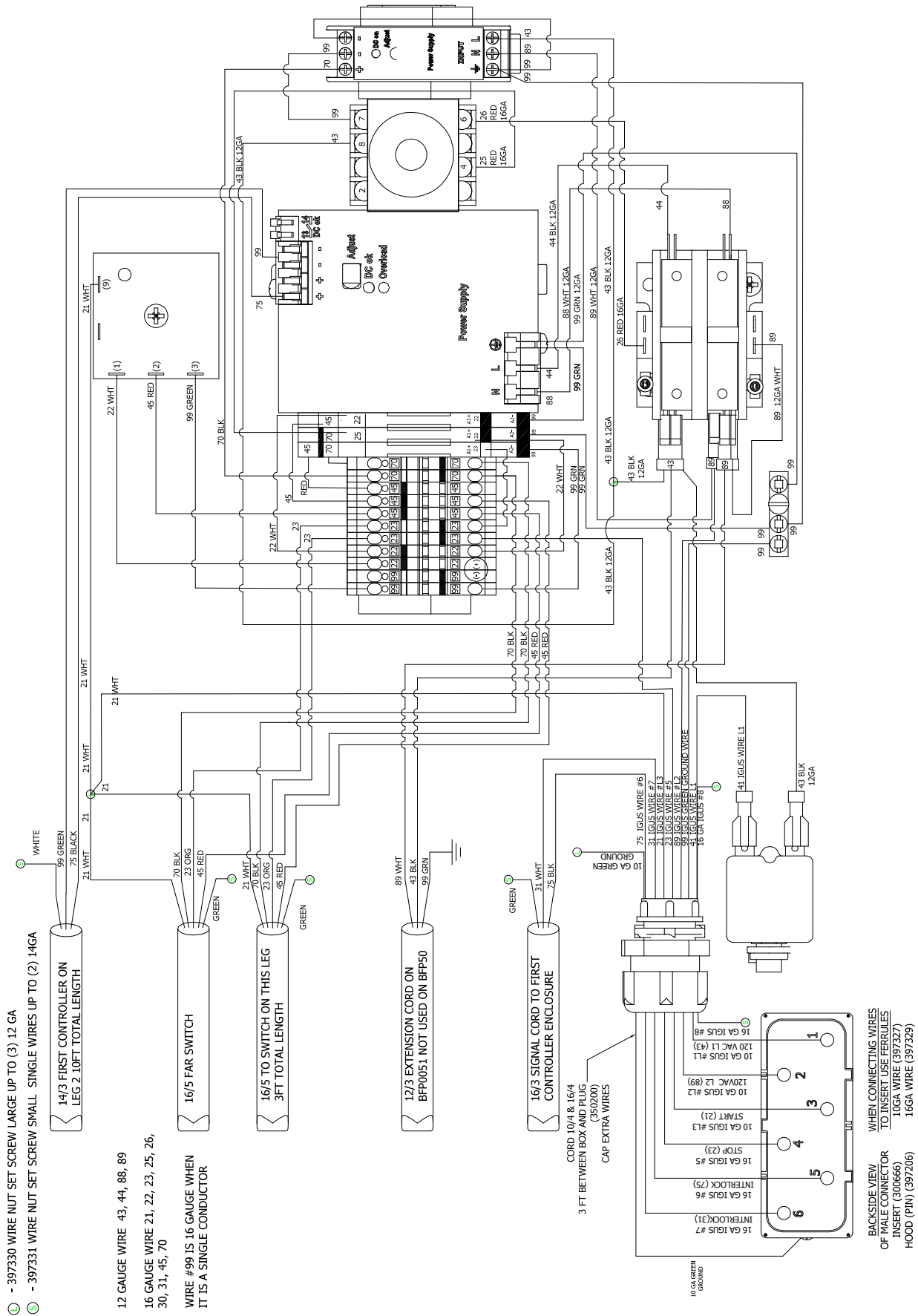
## BFP0051 POWER SUPPLY COMPONENT LAYOUT



ITEM	QTY	NAME	DESCRIPTION
1	1	1-90076	Circuit Breaker - 20A
2	5	3098	HexNut 10-24 ZP
3	4	3344	SCREW PHIL 10-24 3/8
4	2	10015	BOLT,HEX,1/4-20X1-3/4
5	2	11110	NUT,NYLOCK,1/4-20
6	4	12000	WASHER,FLAT,1/4
7	5	12120	WASHER,LOCK,#10
8	5	15010-N	NUT CONN CABL/BOX 1/2 NPT
9	2	15017-1	TERM, DISCONN F 12-10 BULK
10	1	15037	CORD ELECT 16/3 SO LEG 2
11	10	15037-1	CORD ELECT 16/3 SO FIRST SWITCH
12	35	15037-4	CORD ELECT 12/3 SO EXTENSION CORD
13	5	15037-5	CORD ELECT 16/5 SO SWITCH 1
14	33	15037-5	CORD ELECT 16/5 SO TO SWITCH 2
15	1	300112	Bushing, 3/4" Plastic
16	5	300113	Bushing. 1/2" Plastic
17	3	300115	Strain Rel-1/2-375-500-S
18	1	300119	Locknut, 3/4" Conduit
19	2	300213	Strain Rel-1/2-625-750-S
20	11	300247	Terminal Block
21	2	300248	Terminal Block, Anchor End
22	1	300487	Relay - Time Delay Adjustable
23	1	300666	Plug Insert Labeled 1-6
24	1	300925	RELAY BASE, ROUND DIN
25	1	300986	CAPACITOR, 25V X 150uF
26	2	302421	Strain Rel-3/4-625-750-S
27	6	350200	CORD, 4 COND 10/4 & 4 COND 16/4
28	1	397197	RELAY, 12VDC ONE SHOT SS
29	1	397206	HOOD CONN PIN_S_INST 6 PIN 30A
30	1	397217	POWER SUPPLY 20AMP
31	3	397220	RELAY, 24VDC SPDT SL DIN RAIL
32	1	397229	POWER SUPPLY 24VDC 15W .6A
33	1	397230	10-24 x 1-1/4 PHILLIPS SCREW
34	1	400800	3 Position Grounding Bar
35	1	471160	DIN RAIL 35MM X 10 INCH LENGTH
36	1	471163	BACK PLANE DRILLED NP1212P
37	1	471164	ENCL 12X12X6 N1 CONT HINGED DRILLED
38	10	B15017	TERM, SPADE FM 16-14GA
39	1	B15060	RELAY, C25BNB225A SER C1
44	2	65000-001	DIN RAIL CLAMP, IDEC # BNL-5

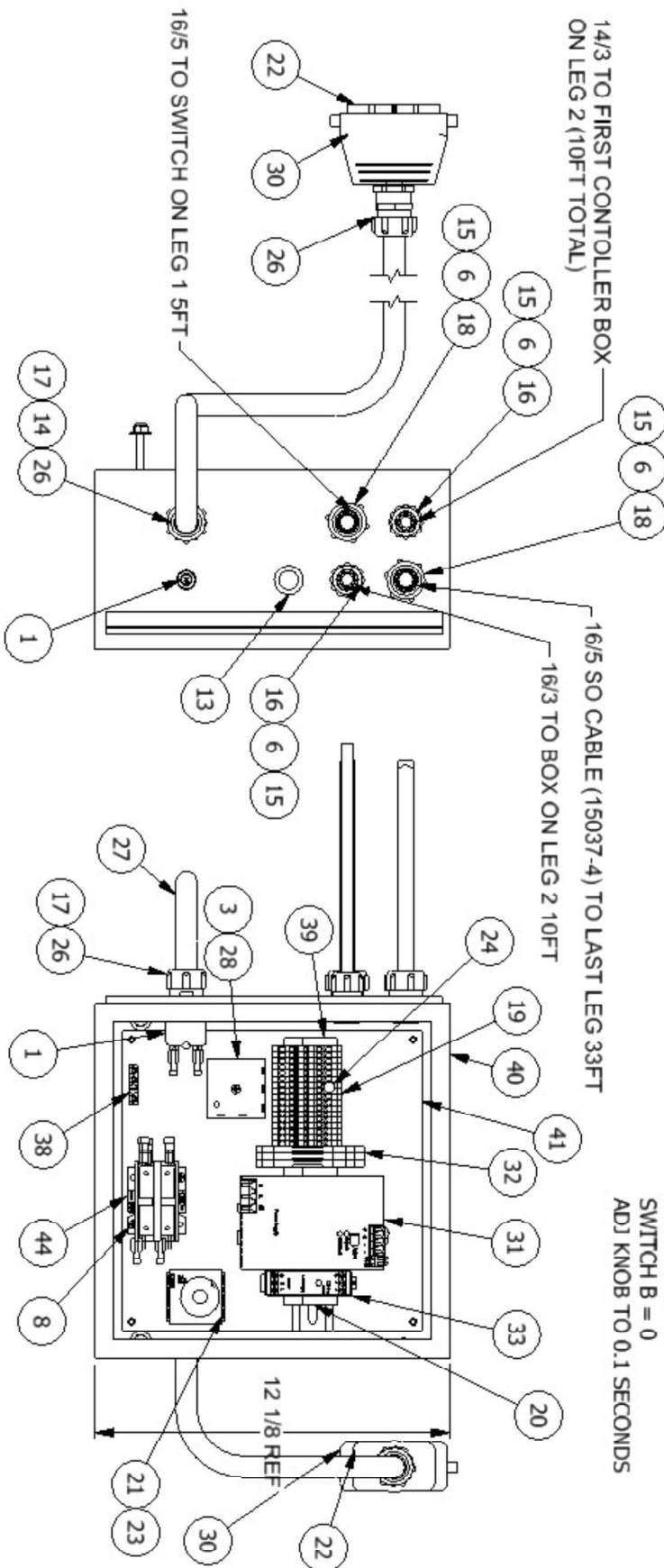
# 1-08020-WD

## BFP0051 POWER SUPPLY PANEL WIRING DIAGRAM



# 1-08022

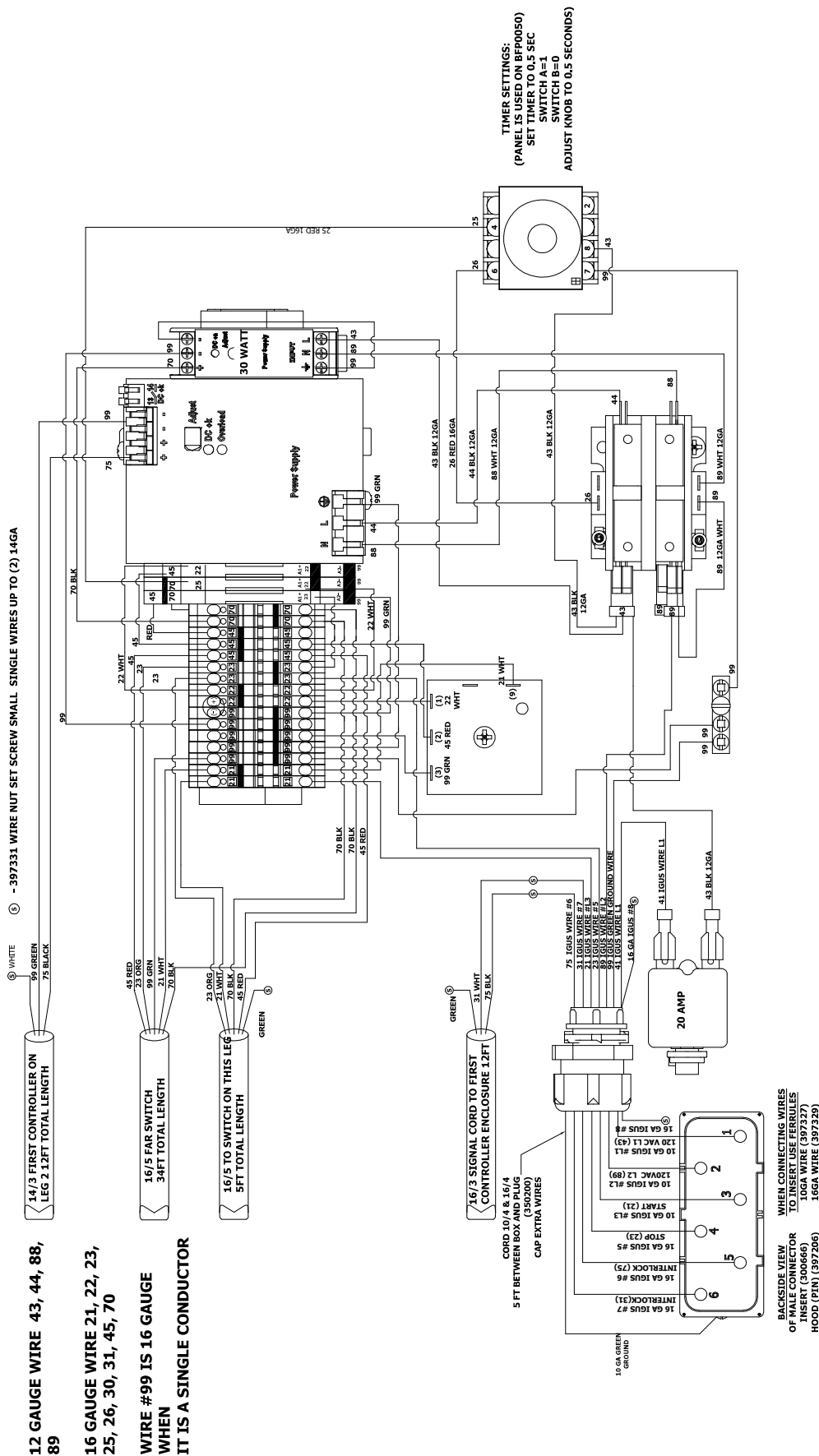
## BFP0050 POWER SUPPLY COMPONENT LAYOUT



ITEM	QTY	NAME	DESCRIPTION
1	1	1-90076	Circuit Breaker - 20A
2	2	10015	BOLT,HEX,1/4-20X1-3/4
3	3	10530-5	10-32 x 1 PHILLIPS SCREW
4	2	11110	NUT,NYLOCK,1/4-20
5	4	12000	WASHER,FLAT,1/4
6	4	15010-N	NUT CONN CABL/BOX 1/2 NPT
7	2	15017-1	TERM, DISCONN F 12-10 BULK
8	4	15030-3	SCREW 8-32X3/8
9	9	15037	CORD ELECT 16/3 SO LEG 2
10	10	15037-1	CORD ELECT 16/3 SO FIRST SWITCH
11	33	15037-5	CORD ELECT 16/5 SO TO SWITCH 2
12	5	15037-5	CORD ELECT 16/5 SO SWITCH 1
13	1	15211	KNOCKOUT_SEAL 1/2_INCH
14	1	300112	Bushing, 3/4" Plastic
15	4	300113	Bushing. 1/2" Plastic
16	2	300115	Strain Rel-1/2-375-500-S
17	1	300119	Locknut, 3/4" Conduit
18	2	300213	Strain Rel-1/2-625-750-S
19	17	300247	Terminal Block
20	3	300248	Terminal Block, Anchor End
21	1	300487	Relay - Time Delay Adjustable
22	1	300666	Plug Insert Labeled 1-6
23	1	300925	RELAY BASE, ROUND DIN
24	1	300986	CAPACITOR, 25V X 150uF
25	2	302415	TERM BLOCK JUMPER 10 PIN
26	2	302421	Strain Rel-3/4-625-750-S
27	6	350200	CORD, 4 COND 10/4 & 4 COND 16/4
28	1	397197	RELAY, 12VDC ONE SHOT SS
29	1	397201	RELAY JUMPER COMBS IDEC SLIM LINE
30	1	397206	HOOD CONN PIN_S_INST 6 PIN 30A
31	1	397217	POWER SUPPLY 20AMP
32	3	397220	RELAY, 24VDC SPDT SL DIN RAIL
33	1	397360	POWER SUPPLY 24VDC 30W 1.25A
34	4	397327	FERRULE 10 GA CRIMP
35	3	397329	FERRULE 16 GA CRIMP
36	2	397330	WIRE NUT SET SCREW LARGE
37	5	397331	WIRE NUT SET SCREW MEDIUM
38	1	400800	3 Position Grounding Bar
39	1	471160	DIN RAIL 35MM X 10 INCH LENGTH
40	1	471164	ENCL 12X12X6 N1 CONT HINGED DRILLED
41	1	471169	BACK PLANE DRILLED NP1212P
42	4	B15015	TERM, FORK #10 STUD 16-14GA BLUE
43	10	B15017	TERM, SPADE FM 16-14GA
44	1	B15060	RELAY, C25BNB225A SER C1

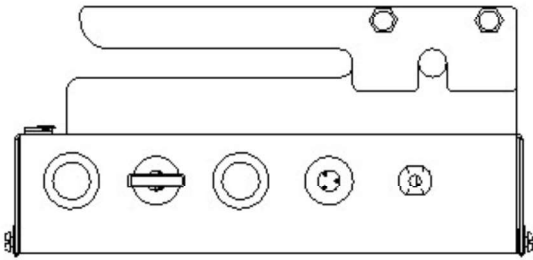
# 1-08022-WD

## BFP0050 POWER SUPPLY PANEL WIRING DIAGRAM

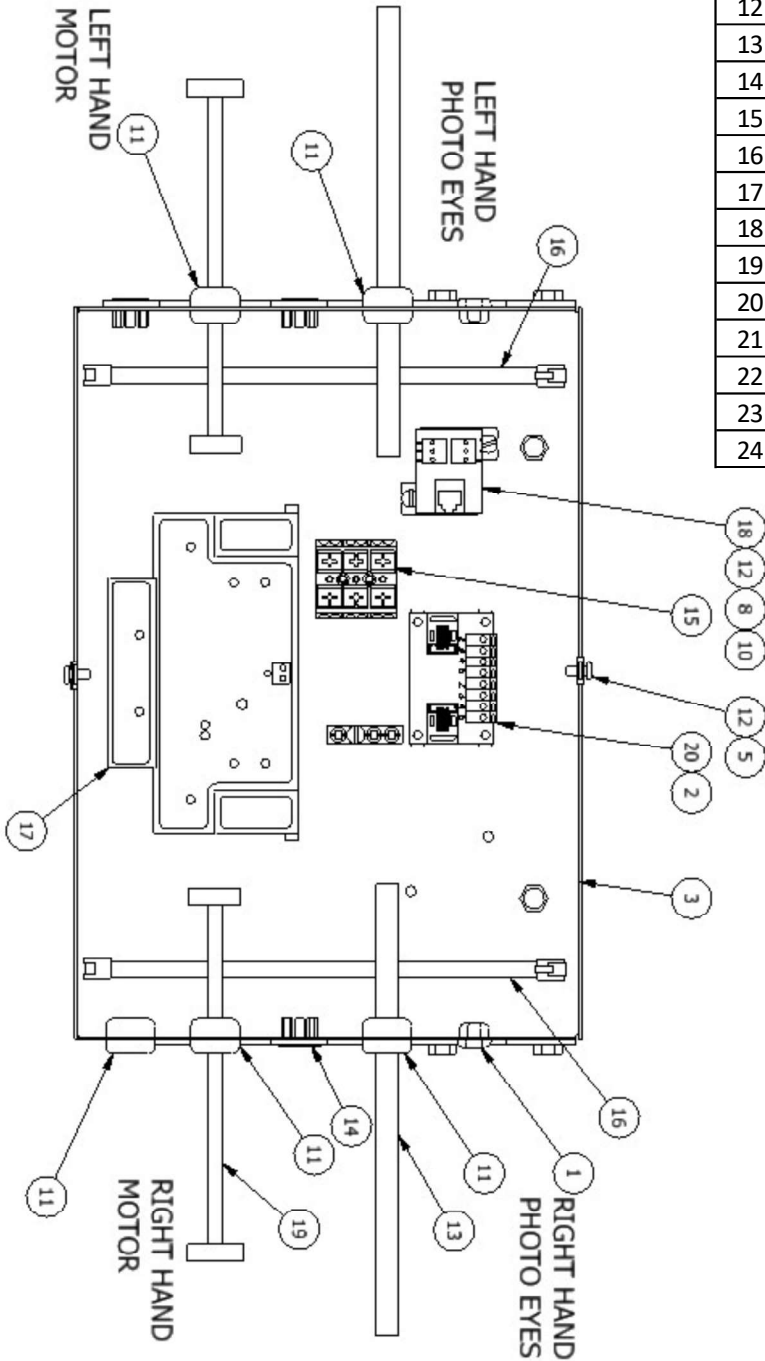


# 1-08025

## FIRST ZONE, BRUSHLESS DC CONTROLLER, COMPONENT LAYOUT

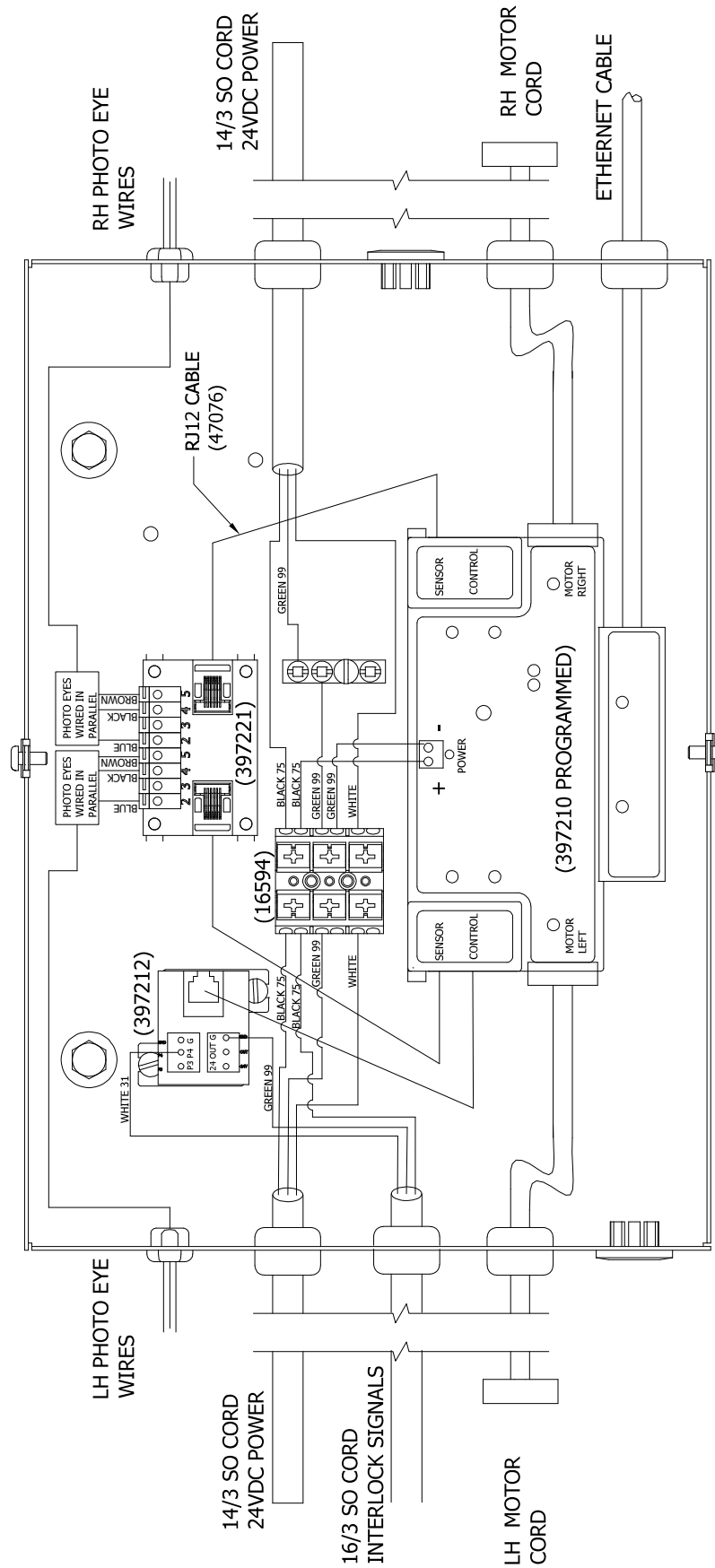


ITEM	QTY	NAME	DESCRIPTION
1	2	1-90019	STRAINRELIEF, .250-.290 CABLE
2	4	1-90056	Standoff, Plastic Bulk
3	1	1-90085	ENCL, DC BRUSHLESS CTRL
4	1	1-90086	ENCL LID, DC BRUSHLESS CTRL
5	2	1-90153	NUT, UCLIP 8-32
8	2	11279	Nut, Machine #8-32
10	2	12120	WASHER, LOCK, #10
11	5	15012-1	Strain Relief, 16-3 Wire
12	4	15030-3	Machine Screw, #8-32x3/8
13	10	15037-1	CORD ELECT 14/3 SJ
14	3	15211	KNOCKOUT_SEAL_1/2_INCH
15	1	16594	TERM, STRIP 3 POLE CAGE CLAMP
16	2	47076	COM CABLE ASSEMBLY RJ12
17	1	397210	CONVEYLINX 2 ZONE CONTROLLER
18	1	397212	CONTROL PORT BREAKOUT BOARD
19	2	397213	PULSEROLLER MOTOR EXT 50CM
20	1	397221	BOARD, PHOTO INTERFACE
21	1	400800	3 Position Grounding Bar
22	1	1-90100	BRKT, DC BRUSHLESS CTRL MOUNT
23	2	1-90101	BRKT DC BRUSHLESS ENCL MNT CLAMP
24	6	10531	SCREW HSH STAP 1/4 - 20 X 3/4



# 1-08025-WD

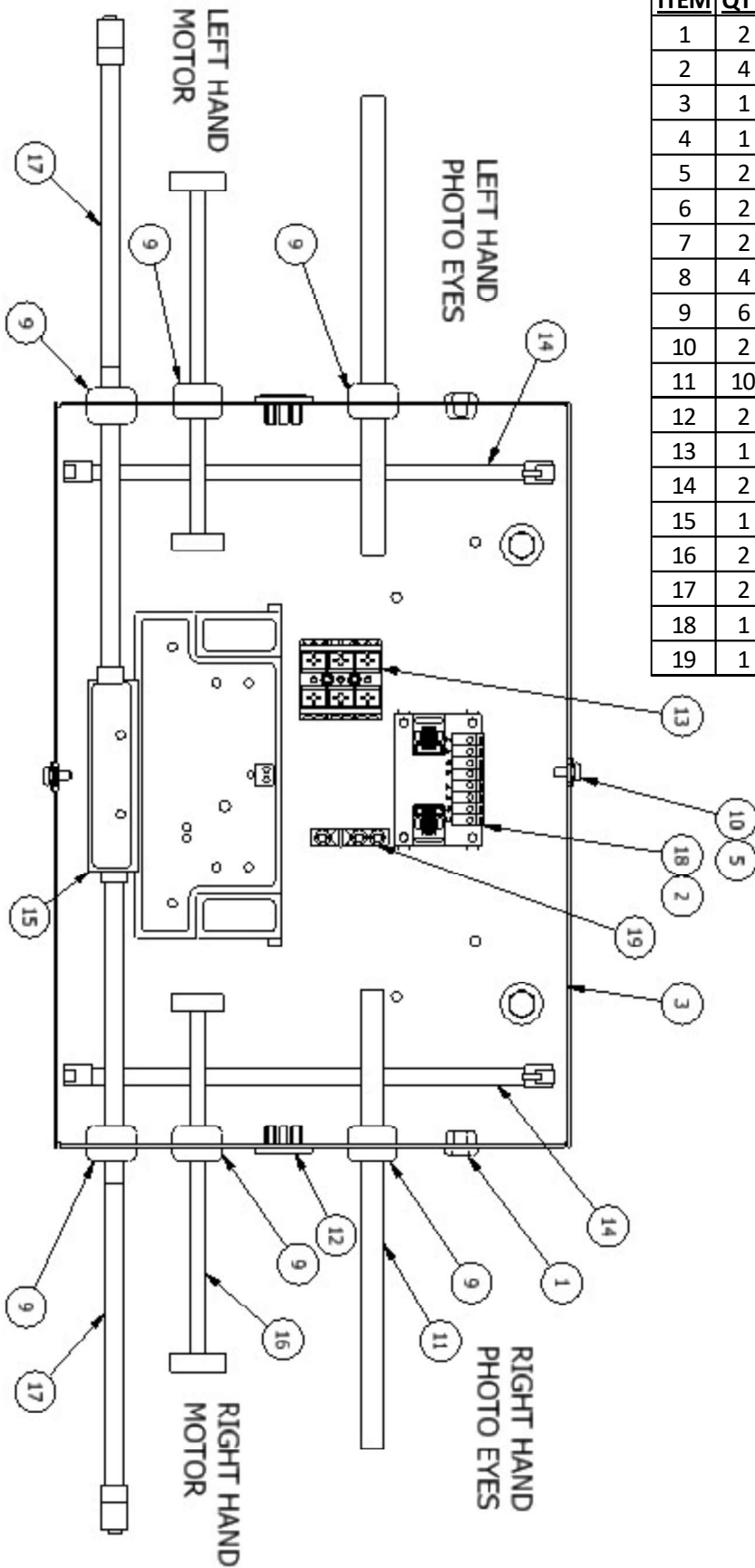
## FIRST ZONE, BRUSHLESS DC CONTROLLER, WIRING DIAGRAM





# 1-08026

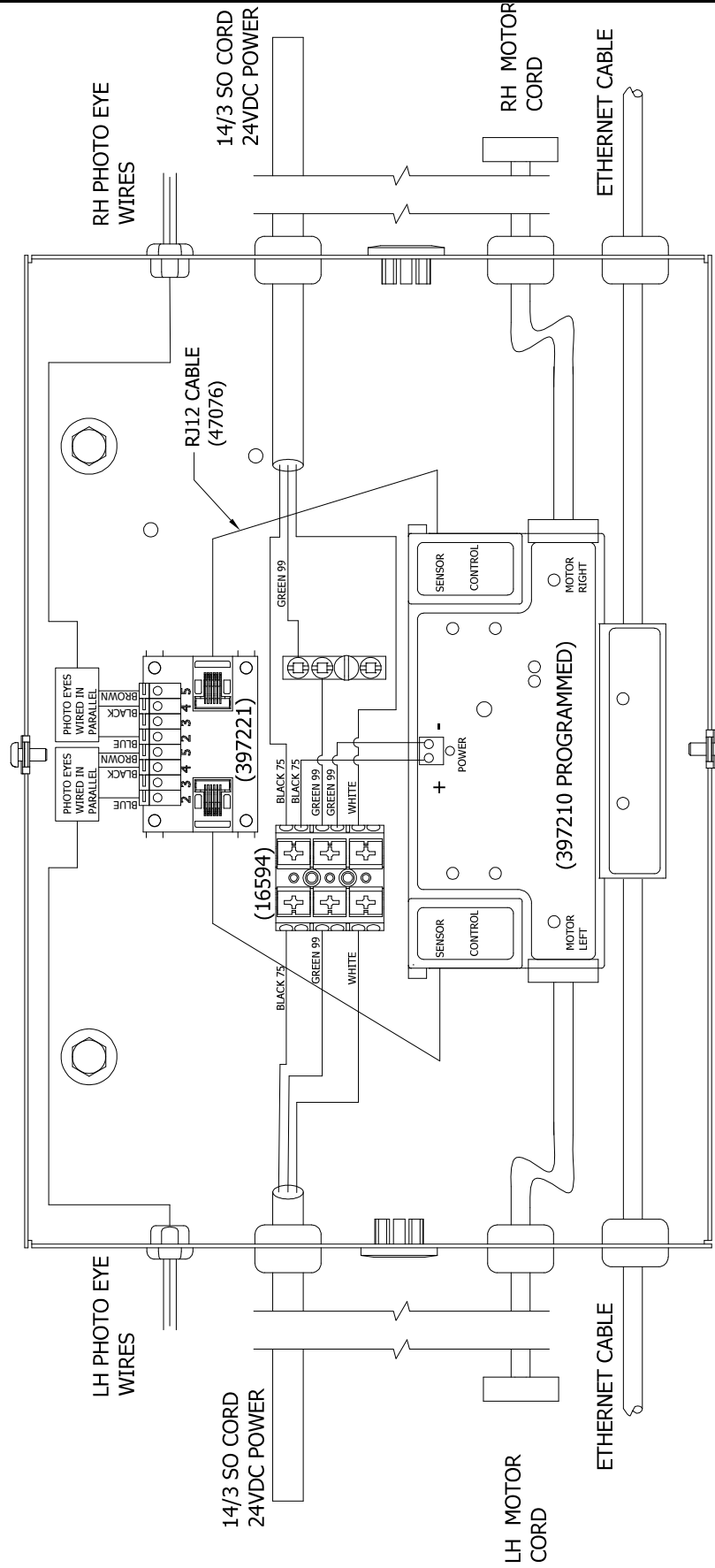
## MID ZONE, BRUSHLESS DC CONTROLLER, COMPONENT LAYOUT



ITEM	QTY	NAME	DESCRIPTION
1	2	1-90019	STRAINRELIEF, .250-.290 CABLE
2	4	1-90056	Standoff, Plastic Bulk
3	1	1-90085	ENCL, DC BRUSHLESS CTRL
4	1	1-90086	ENCL LID, DC BRUSHLESS CTRL
5	2	1-90153	NUT, UCLIP 8-32
6	2	10015	BOLT,HEX,1/4-20X1-3/4
7	2	11110	NUT,NYLOCK,1/4-20
8	4	12000	WASHER,FLAT,1/4
9	6	15012-1	Strain Relief, 16-3 Wire
10	2	15030-3	Machine Screw, #8-32x3/8
11	10	15037-1	CORD ELECT 14/3 SJ
12	2	15211	KNOCKOUT_SEAL_1/2_INCH
13	1	16594	TERM, STRIP 3 POLE CAGE CLAMP
14	2	47076	COM CABLE ASSEMBLY RJ12
15	1	397210	CONVEYLINX 2 ZONE CONTROLLER
16	2	397213	PULSEROLLER MOTOR EXT 50CM
17	2	397219	EETHERNET CABLE HD 7ft
18	1	397221	BOARD, PHOTO INTERFACE
19	1	400800	3 Position Grounding Bar

# 1-08026-WD

## MID ZONE, BRUSHLESS DC CONTROLLER, WIRING DIAGRAM



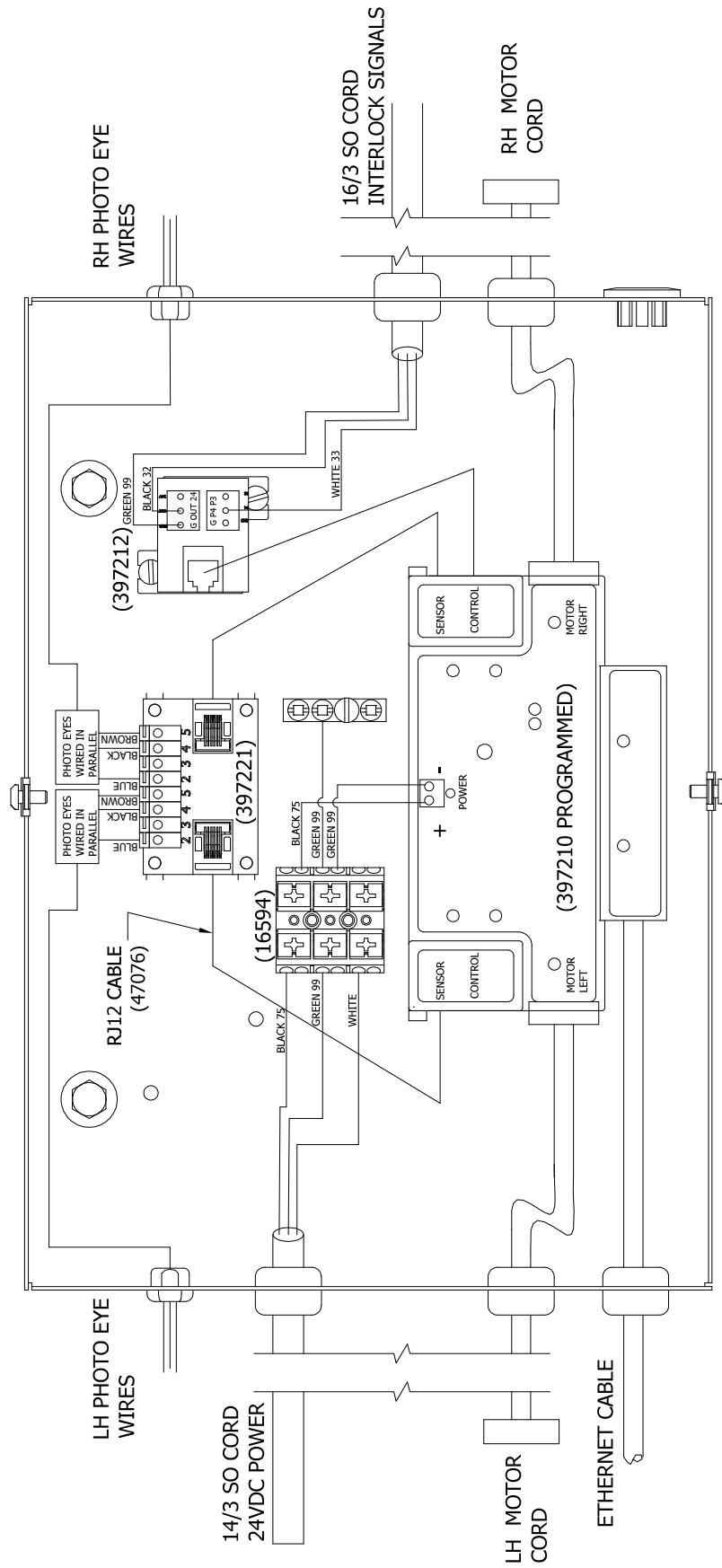
# 1-08027

## END ZONE, BRUSHLESS DC CONTROLLER, COMPONENT LAYOUT

ITEM	QTY	NAME	DESCRIPTION
1	2	1-90019	STRAINRELIEF, .250-.290 CABLE
2	4	1-90056	Standoff, Plastic Bulk
3	1	1-90085	ENCL, DC BRUSHLESS CTRL
4	1	1-90086	ENCL LID, DC BRUSHLESS CTRL
5	2	1-90153	NUT, UCLIP 8-32
6	2	10015	BOLT,HEX, 1/4-20X1-3/4
7	2	11110	NUT, NYLOCK, 1/4-20
8	2	11279	Nut, Machine #8-32
9	4	12000	WASHER, FLAT, 1/4
10	2	12120	WASHER, LOCK, #10
11	5	15012-1	Strain Relief, 16-3 Wire
12	4	15030-3	Machine Screw, #8-32x3/8
13	10	15037-1	CORD ELECT 14/3 SJ
14	3	15211	KNOCKOUT_SEAL_1/2_INCH
15	1	16594	TERM, STRIP 3 POLE CAGE CLAMP
16	2	47076	COM CABLE ASSEMBLY RJ12
17	1	397210	CONVEYLINX 2 ZONE CONTROLLER
18	1	397212	CONTROL PORT BREAKOUT BOARD
19	2	397213	PULSEROLLER MOTOR EXT 50CM
20	1	397221	BOARD, PHOTO INTERFACE
21	1	400800	3 Position Grounding Bar

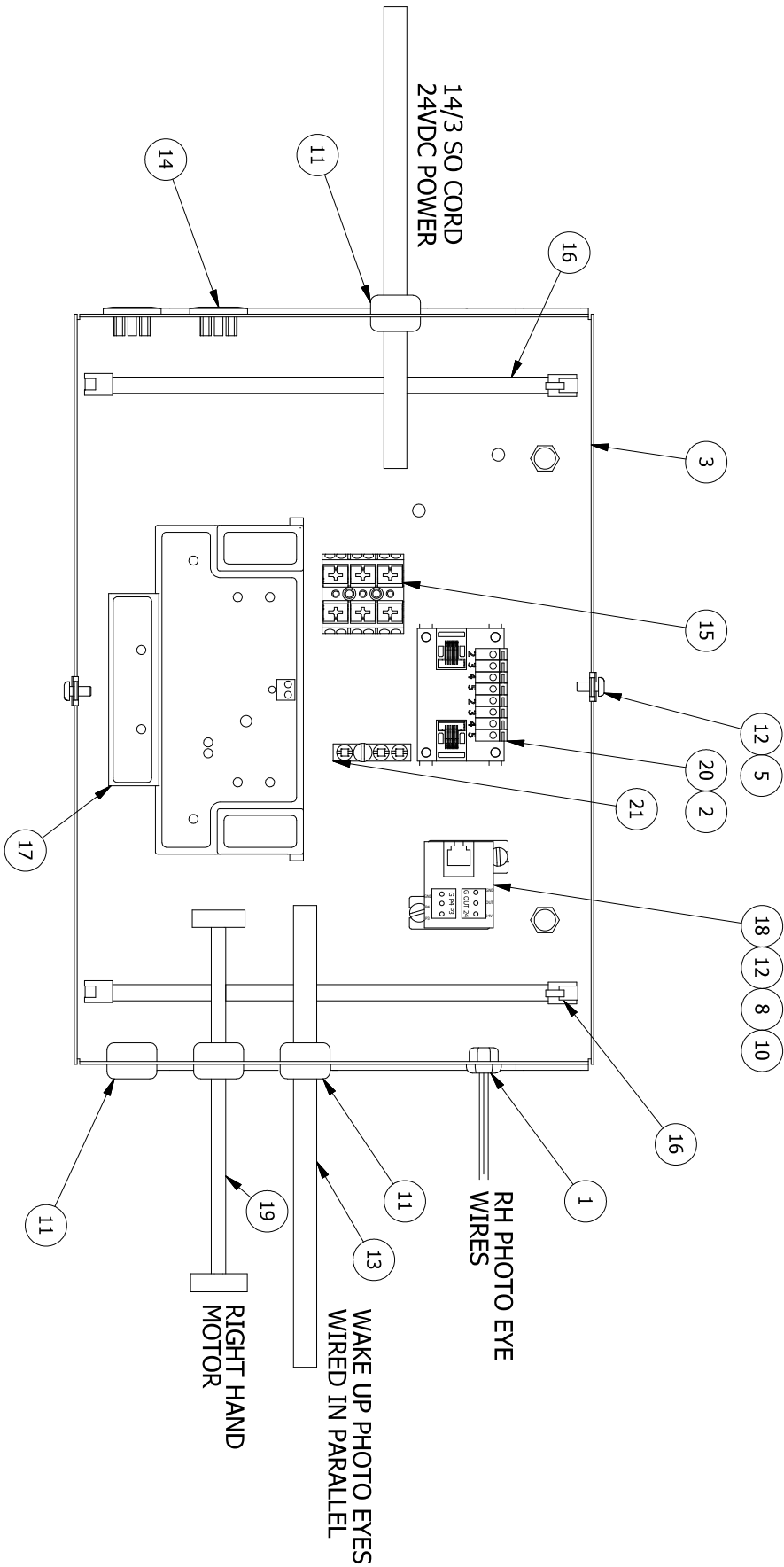
# 1-08027-WD

## END ZONE, BRUSHLESS DC CONTROLLER, WIRING DIAGRAM



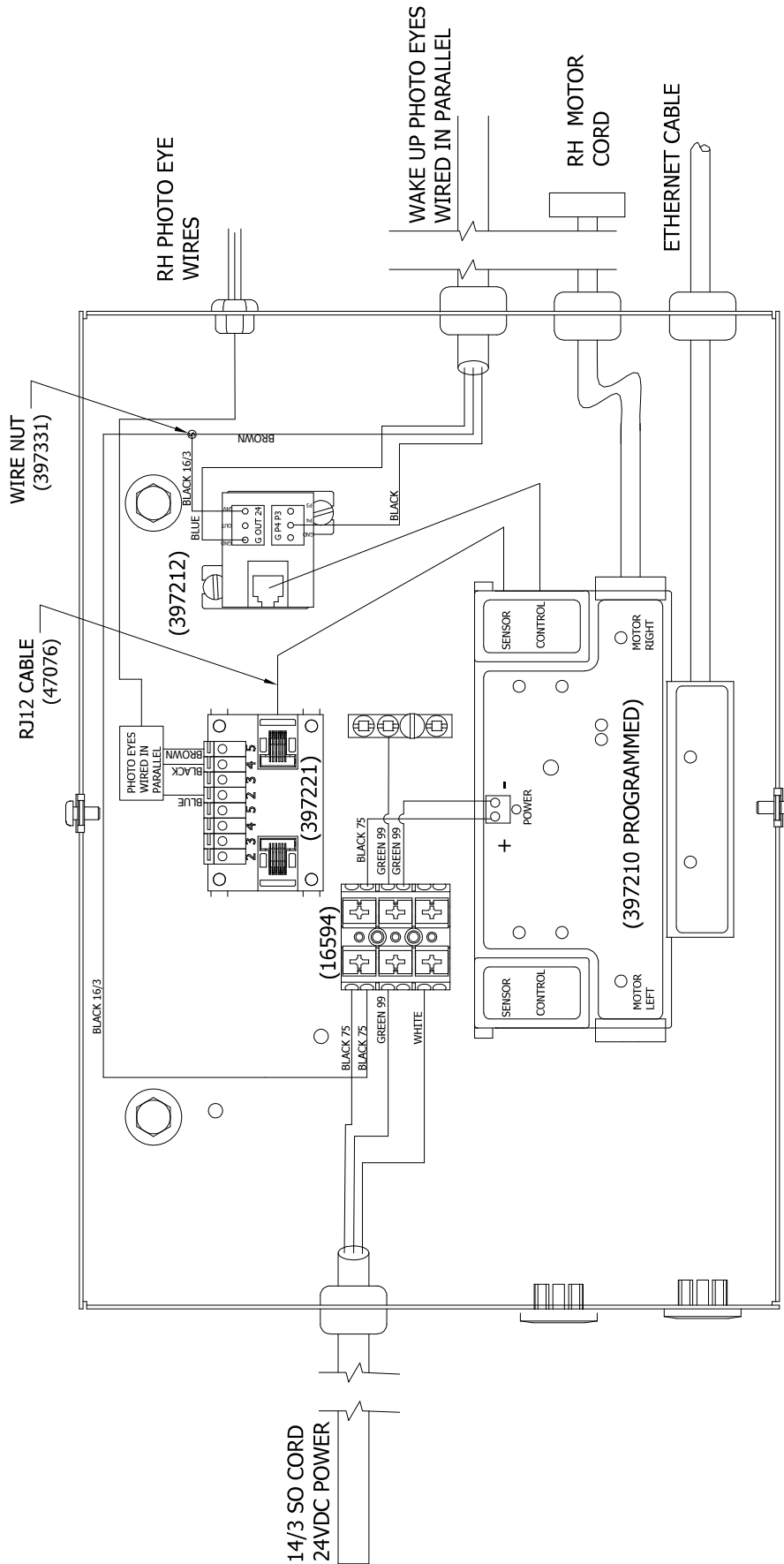
# 1-08028

## PHOTO-EYE ZONE, BRUSHLESS DC CONTROLLER, COMPONENT LAYOUT



# 1-08028-WD

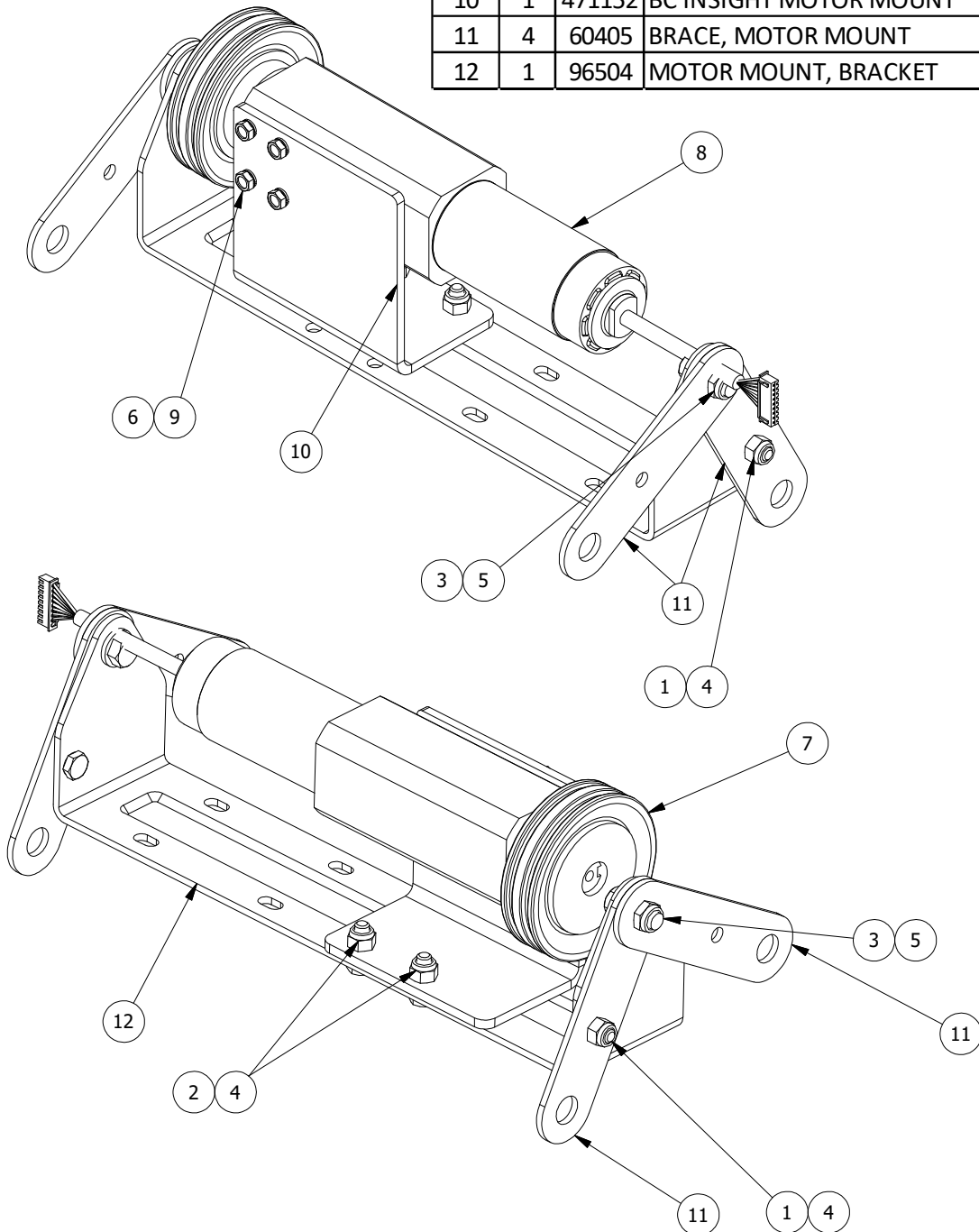
## PHOTO-EYE ZONE, BRUSHLESS DC CONTROLLER, WIRING DIAGRAM



# 1-07068

## DC BRUSHLESS MOTOR ASSY

ITEM	QTY	NAME	DESCRIPTION
1	2	10000	BOLT,HEX,1/4-20X5/8
2	2	10010	BOLT,HEX,1/4-20X3/4
3	2	10600	Bolt SH 3/8X.356W 5/16-18
4	4	11110	NUT,NYLOCK,1/4-20
5	2	11122	NUT,NYLOCK JAM,5/16-18
6	4	12120	WASHER,LOCK,#10
7	1	19006	Drive Pulley, Dbl.
8	1	397208	MOTOR/W GEARBOX, DC BRUSHLESS 24V
9	4	397209	BOLT, HHC M5X0.8X12 METRIC
10	1	471152	BC INSIGHT MOTOR MOUNT
11	4	60405	BRACE, MOTOR MOUNT
12	1	96504	MOTOR MOUNT, BRACKET



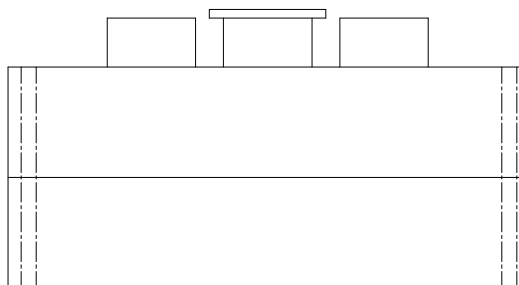
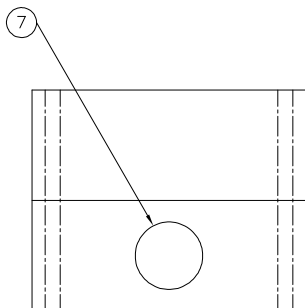
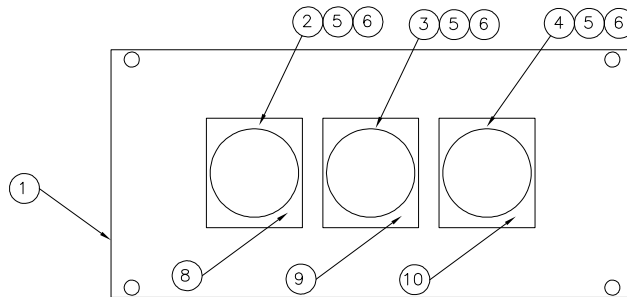
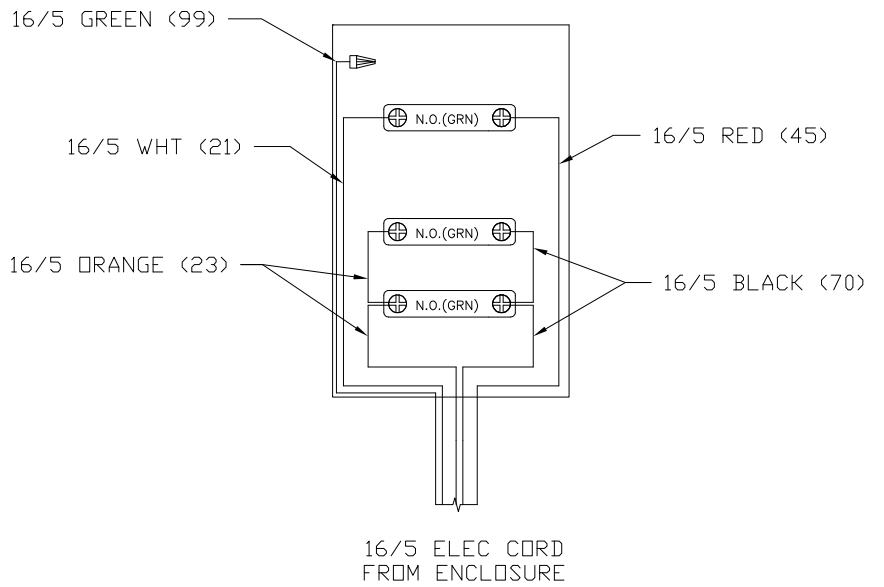
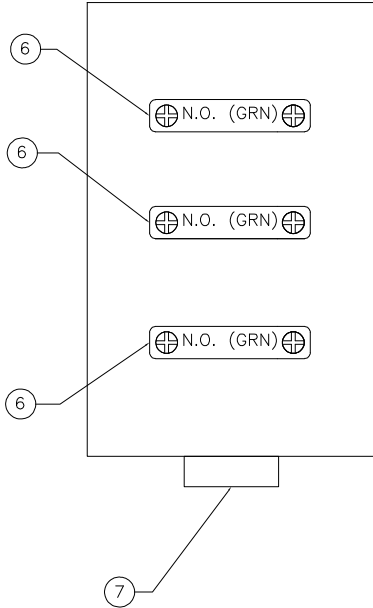
# 1-06420

## START/STOP/E-STOP SWITCH ASSY

ITEM	QTY	NAME	DESCRIPTION
1	1	300903	ENCLOSURE, 3 HOLE 22mm PLASTIC
2	1	300906	PUSHBUTTON, 22mm GREEN
3	1	300907	PUSHBUTTON, 22mm E-STOP
4	1	300905	PUSHBUTTON, 22mm RED
5	3	300904	PUSHBUTTON BASE, 22mm
6	3	300902	CONTACT, 22mm NORM OPEN
7	1	300213	STRAIN RELIEF
8	1	300909	NAMEPLATE, 22mm START
9	1	300910	NAMEPLATE, 22mm E-STOP
10	1	300908	NAMEPLATE, 22mm STOP

START/E-STOP/STOP  
ON FLEXIBLE UNIT

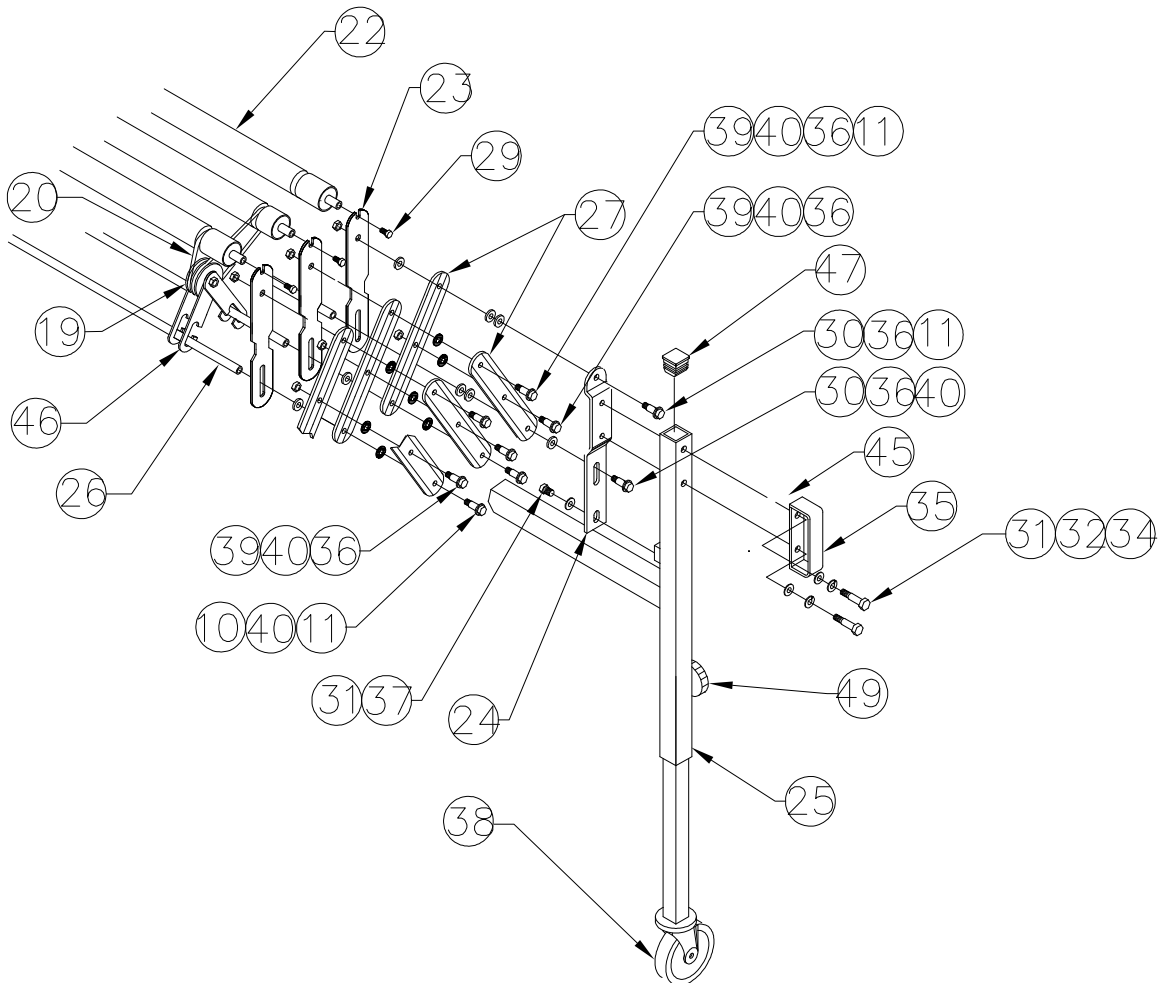
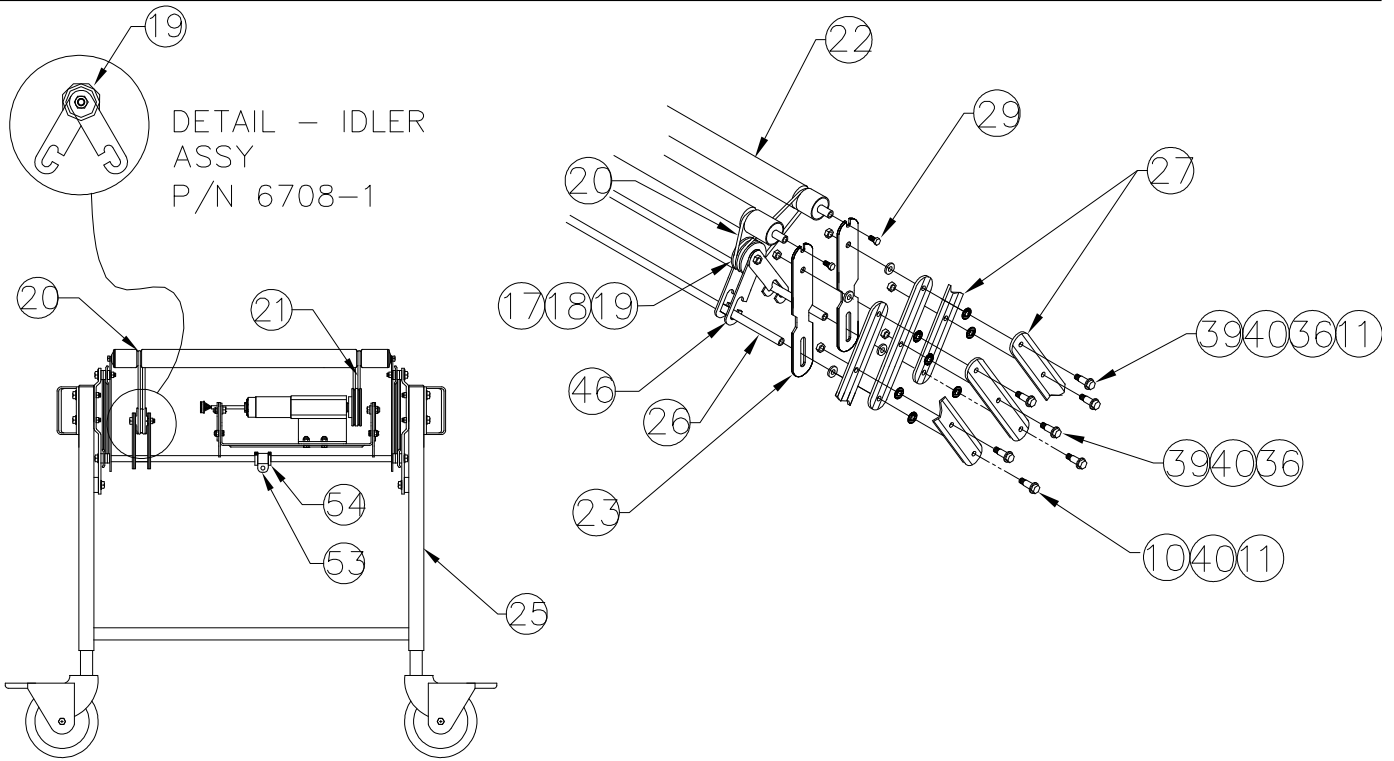
INTERNAL VIEW  
OF ENCLOSURE  
SHOWING CONTACT  
ARRANGEMENT





# PARTS LIST - MECHANICAL COMPONENTS

## COMMON BESTFLEX POWER COMPONENTS



# MECHANICAL COMPONENTS

## COMMON BESTFLEX POWER COMPONENTS

*Use this Parts List and refer to the drawings on the previous page to identify common mechanical components for these conveyors.*

<u>Item</u>	<u>Name</u>	<u>Description</u>
10	10600	BOLT, SHLDR, 3/8X.356 5/16-18
11	11122	NUT, NYL JAM 5/16-18
19	6708-1	PULLEY, IDLER ASY
20	12467	BELT, IDLER, .210X12-11/16 (CLEAR)
21	12466	BELT, DRIVE, .210X13-3/16 (ORANGE)
22	50098-30	ROLLER, 1.510X30
23	60463-4	BRKT RLR MT 1/8X1-5/8X4
24	60379-PR	BRKT LEG MT 4
25	SEE DWG	UPPER LEG WELD (SEE UNIT DRAWINGS)
26	95037-30	AXLE, 12MMX30
27	60492	SIDEBAR, 1-19/32X8-5/8
29	10024	BOLT, HHC 5/16-18X1/2
30	10624	BOLT, SHLDR, 3/8X1.10 5/16-18
31	12020	WASHER, FLAT 3/8
32	12130	WASHER, LOCK 3/8
34	10776	BOLT, HXWAHD, 3/8-16X2-1/8, G5, SELFTAP
35	4001	W LEG MT HANDLE
36	12185	SPACER, NYL 3/4ODX13/32IDX.200
37	10033	BOLT, HHC 3/8-16X1/2 G5
38	SEE DWG	INNER LEG ASSY (SEE UNIT DRAWINGS)
39	10620	BOLT, SHLDR, 3/8X.700 5/16-18
40	12187	WASHER, NYL 1ODX13/32IDX1/16
47	14071	CAP, LEG 1-1/2SQX14GA
49	10009	BOLT, HHC 1/4-20X1-1/2
53	15097	CLAMP, CABLE 1/2
54	15098	CLAMP, HOSE

## RECOMMENDED SPARE PARTS

<u>Part #</u>	<u>Qty</u>	<u>Description</u>
397208	1	Motor w/Gearbox, DC Brushless, 24V
397210	1	Control Board, Conveylinx 2-Zone
397217	1	Power Supply, 20 Amp
397360	1	Power Supply, 24VDC, 30W, 1.25A
300487	1	Relay - Timer Delay, Adjustable
B15060	1	Relay, C25NBN225A, SER C1
397219	2	Ehernet Cable HD, 7ft
397197	1	Relay, 12VDC One-Shot SS
300101	2	Photoeye, Barrel Optic, DC, NPN Diffused
1-06424	1	Start/Stop/E-Stop Switch
12466	4	Belt, Drive, Orange
12467	10	Belt, Idler, Clear
12459	2	Belt, Idler, Green
300058	2	Belt, .210 x 9-7/8 (Used on Rigid Cart)
60492	2	Sidebar, 1-19/32 x 8-5/8
50098-30	1	Roller, 1.51 x 30
50099-30	1	Roller, 1.9 x 30 (Rigid Cart)
10620	5	Shoulder Bolt, 3/8 x 1.10, 5/16-18
10600	5	Shoulder Bolt, 3/8 x .356, 5/16-18
10624	2	Shoulder Bolt, 3/8 x .700, 5/16-18
11122	5	Nut, Nyl Jam, 5/16-18
12185	5	Spacer, Nyl, 3/4ODx13/32IDx.20
12187	5	Washer, Nyl, 1ODx13/32IDx1/16
6140-069	1	A_ILEG_1-1/4X12-1/4_5X1-1/4NB (COMMON)
6172-129	1	A_ILEG_1-1/4X12_8X2B (BFP0050)
6172-130	1	A_ILEG_1-1/4X12_8X2NB (BFP0050)
6172-161	1	A_ILEG_1-1/4X13_8X2B (BFP0051)
6172-162	1	A_ILEG_1-1/4X13_8X2NB (BFP0051)

NOTES:



**C O N V E Y O R S**

A **DURAVANT** COMPANY

**FMH Conveyors**

**9701 E. Highland Drive**

**Jonesboro, AR 72401**

**Toll Free: 800-327-9209**

**Fax: 870-935-3661**

**Website: [www.fmhconveyors.com](http://www.fmhconveyors.com)**