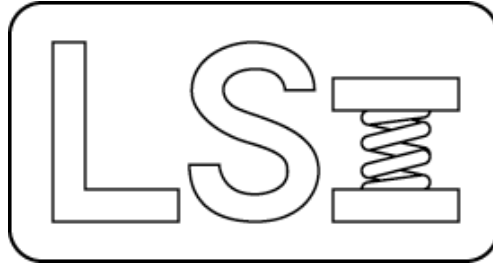


Larson Systems Inc.



FLASH 24 Parts List

050-0000-0122-00 – 1,000 lb Whisper Drive

050-0000-0127-00 – 200 lb Whisper Drive





050-0000-0122-00 C
FLASH 24 - 1,000 lb

Parts List

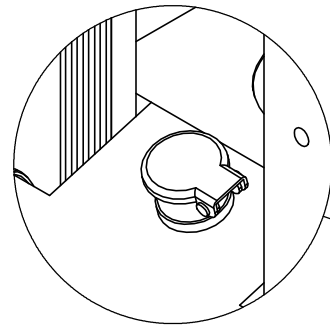
Rev	By	Date	Description
	KMP	06-22-2005	
A	KMP	08-21-2006	Item 2 was 025-0000-0431-00
B	KMP	05-14-2007	Item 5 was 25-2-0090-10
C	DAL	07-19-2010	del 018-0000-2477-00, 013-0000-0231-00,add 059-0000-0009-00

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	025-0000-0174-01	G	Frame Assembly, 24 1,000 lb		in.
2	1	025-0000-0431-10	C	FLASH - Computer Assembly		in.
3	1	025-2000-0160-01	D	Schematic, Flash 24-1000, w/Servo , 120/240 vac		in.
4	1	060-1000-0066-00	E	User Manual - FLASH Series 11 & 24		in.
5	1	060-2000-0024-01		Parts List - FLASH 24, 1,000 lb		in.
6	1	025-6000-0021-00	E	Sticker Assembly - FLASH 24		in.
7	1	059-0000-0009-00	C	Shipping Crate -Flash 24		in.
8	1	060-6000-0114-00		FLASH : System Image Creation Letter		in.

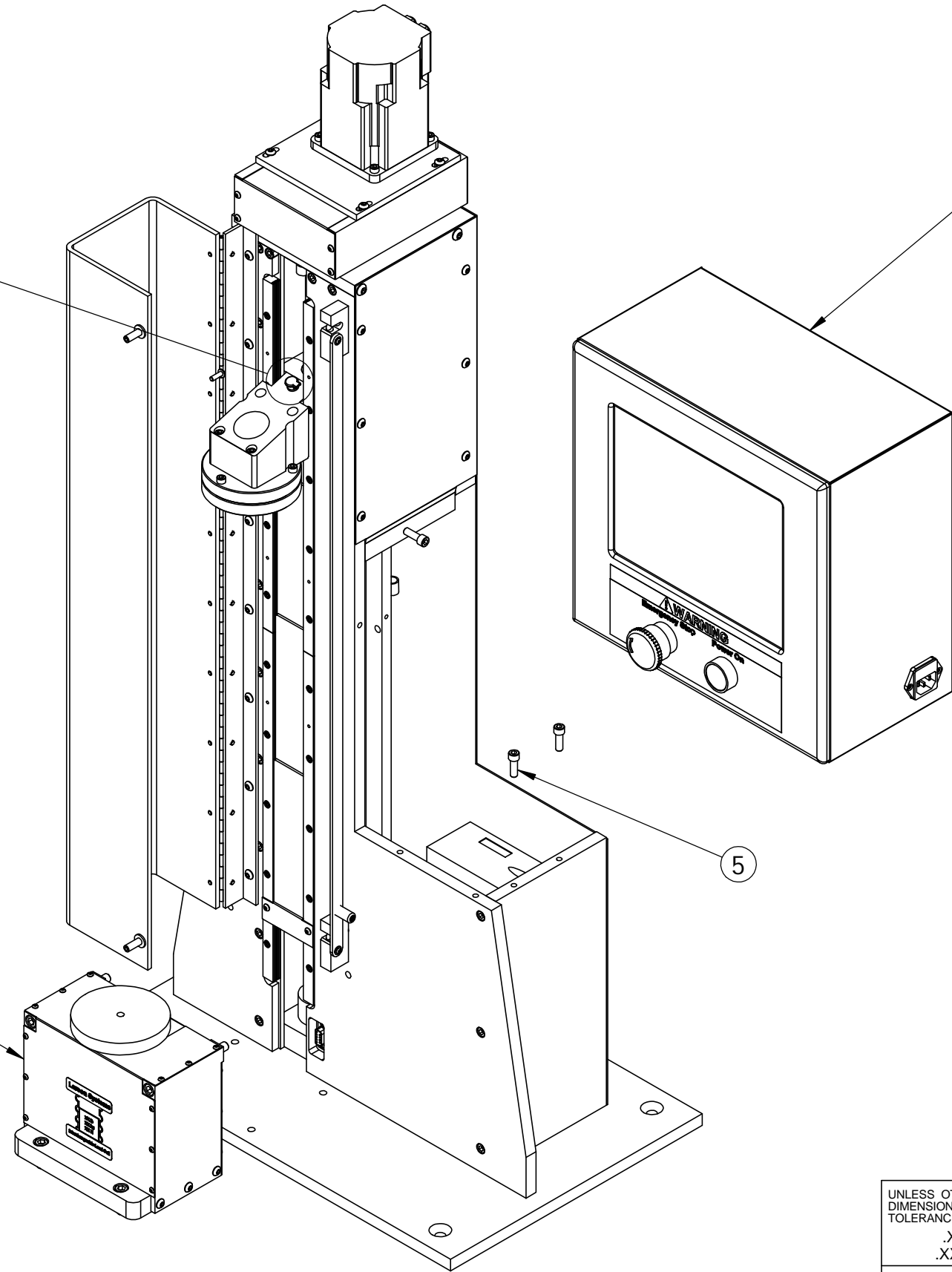
Approved by: 

Date: July 20, 2010

REV	DATE	DESCRIPTION	DRW	APP
		SEE SHEET 5		




NOTE: 1. ADD OIL TO ITEM 15
AFTER ASSY



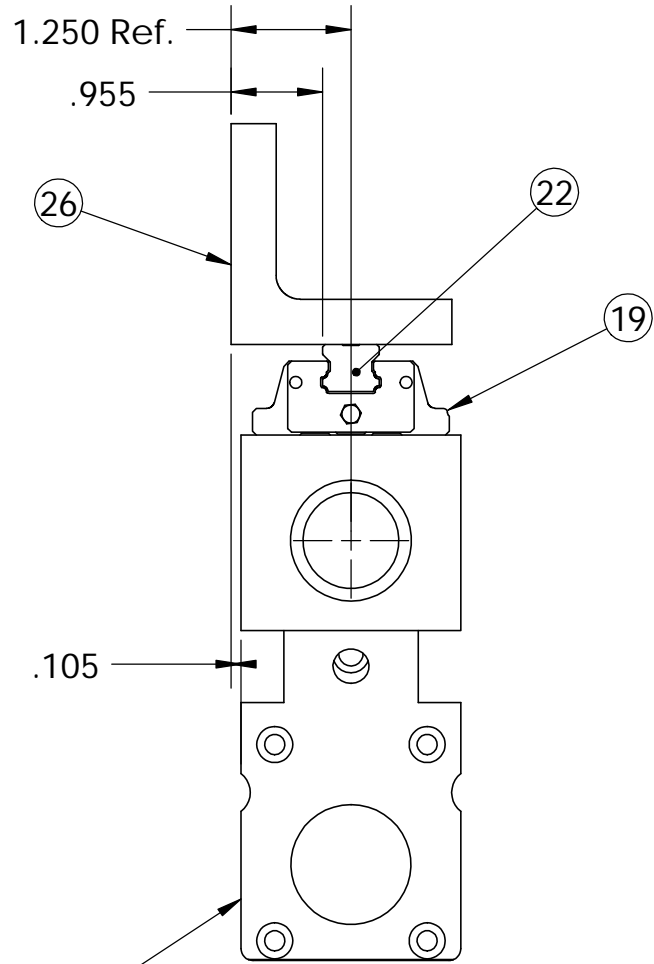
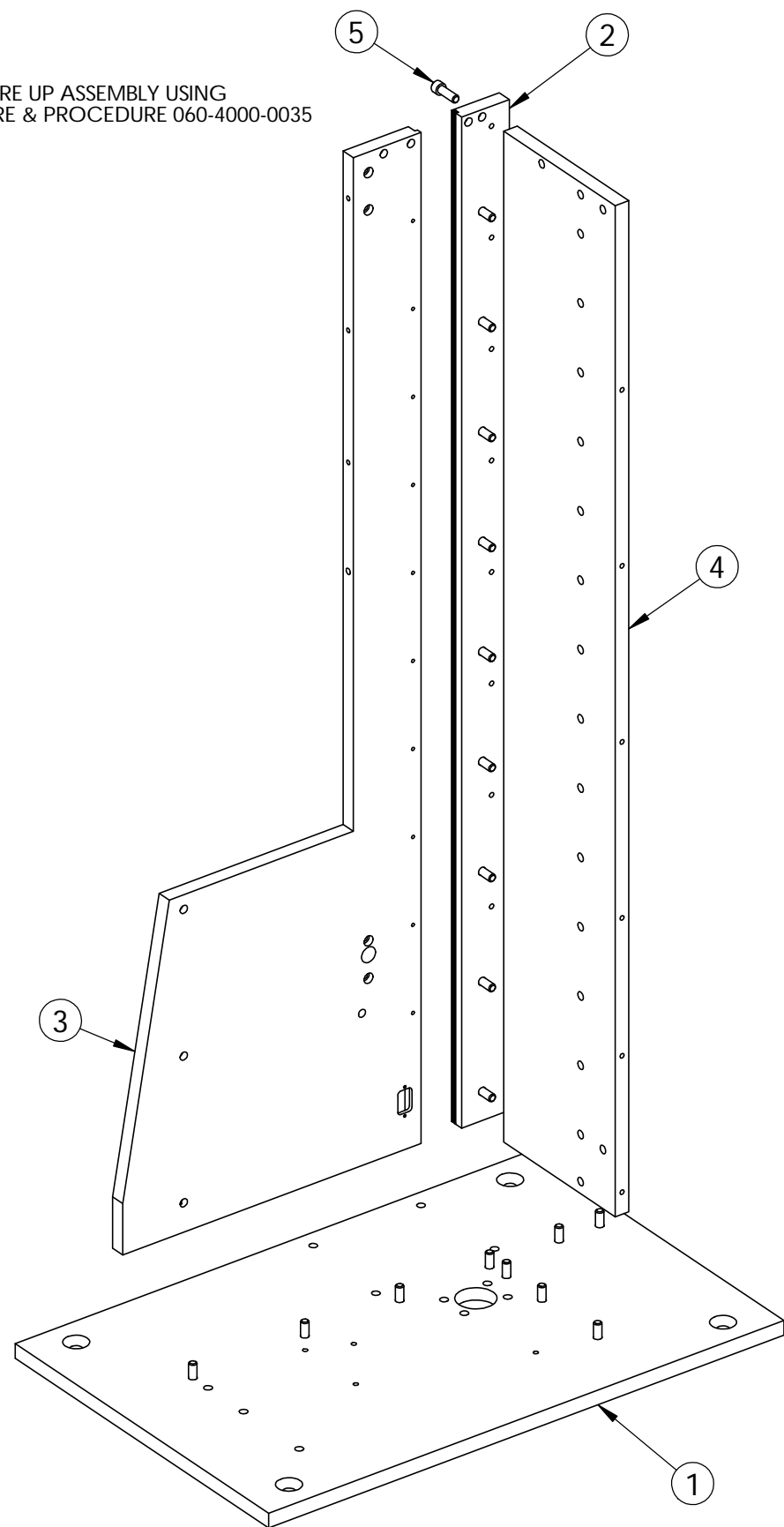
FLASH
REF. ONLY

FLASHLITE
REF. ONLY

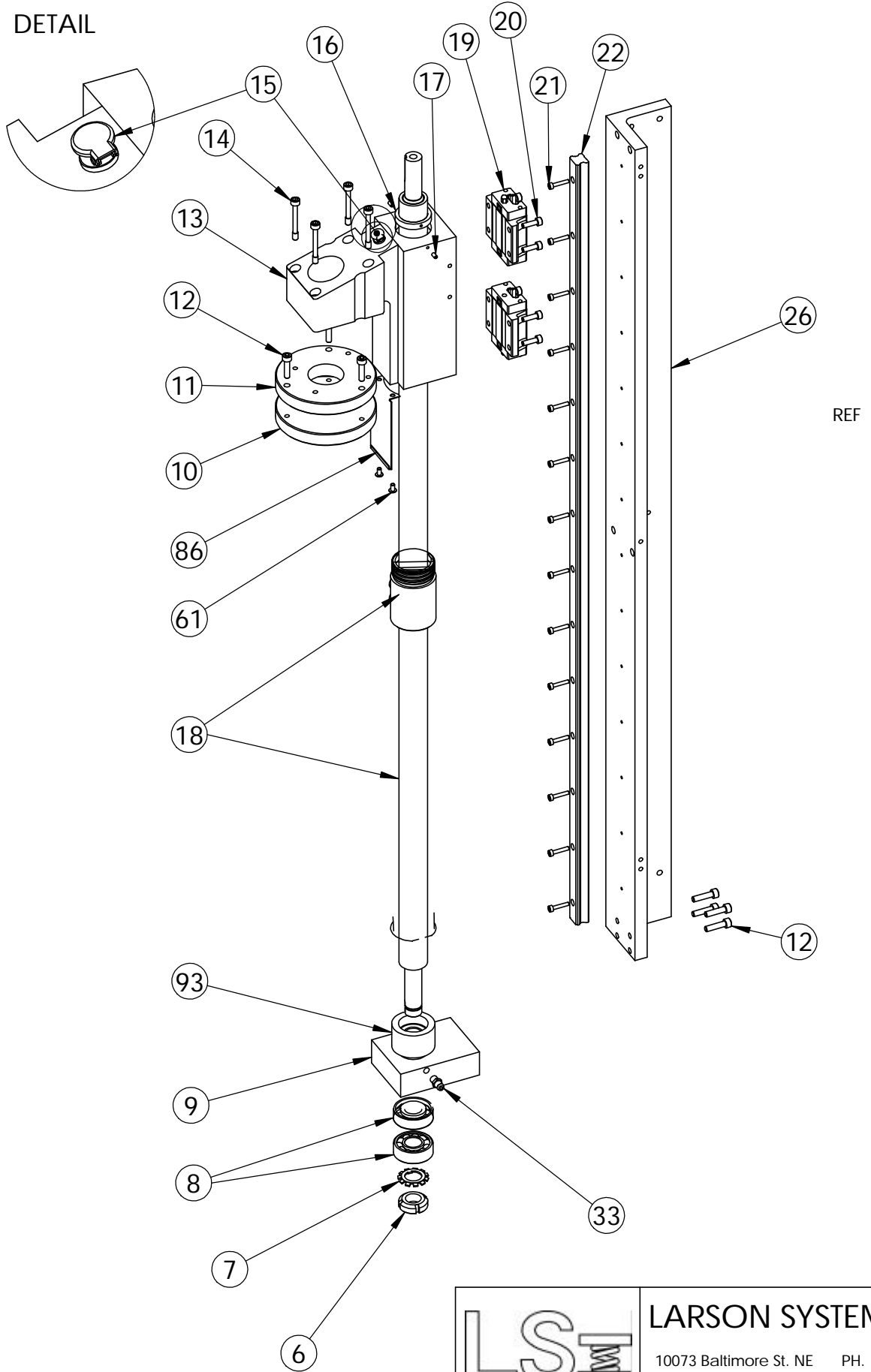
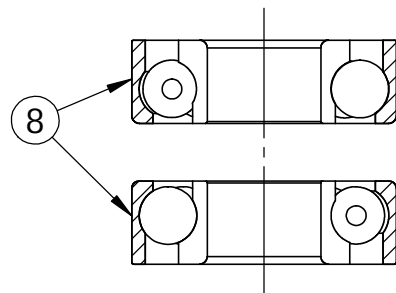
LOAD CELL
REF. ONLY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX ± .01 .XXX ± .005	 LARSON SYSTEMS INC. 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182			
			APPROVALS	DATE
MATERIAL	DRAWN	MEM	12-03-03	FRAME ASSEMBLY 24 1,000 lb
FINISH	APP.			B DWG. NO. 025-0000-0174-01F
HEAT TREAT	APP.			SCALE: NONE SHEET 1 OF 7

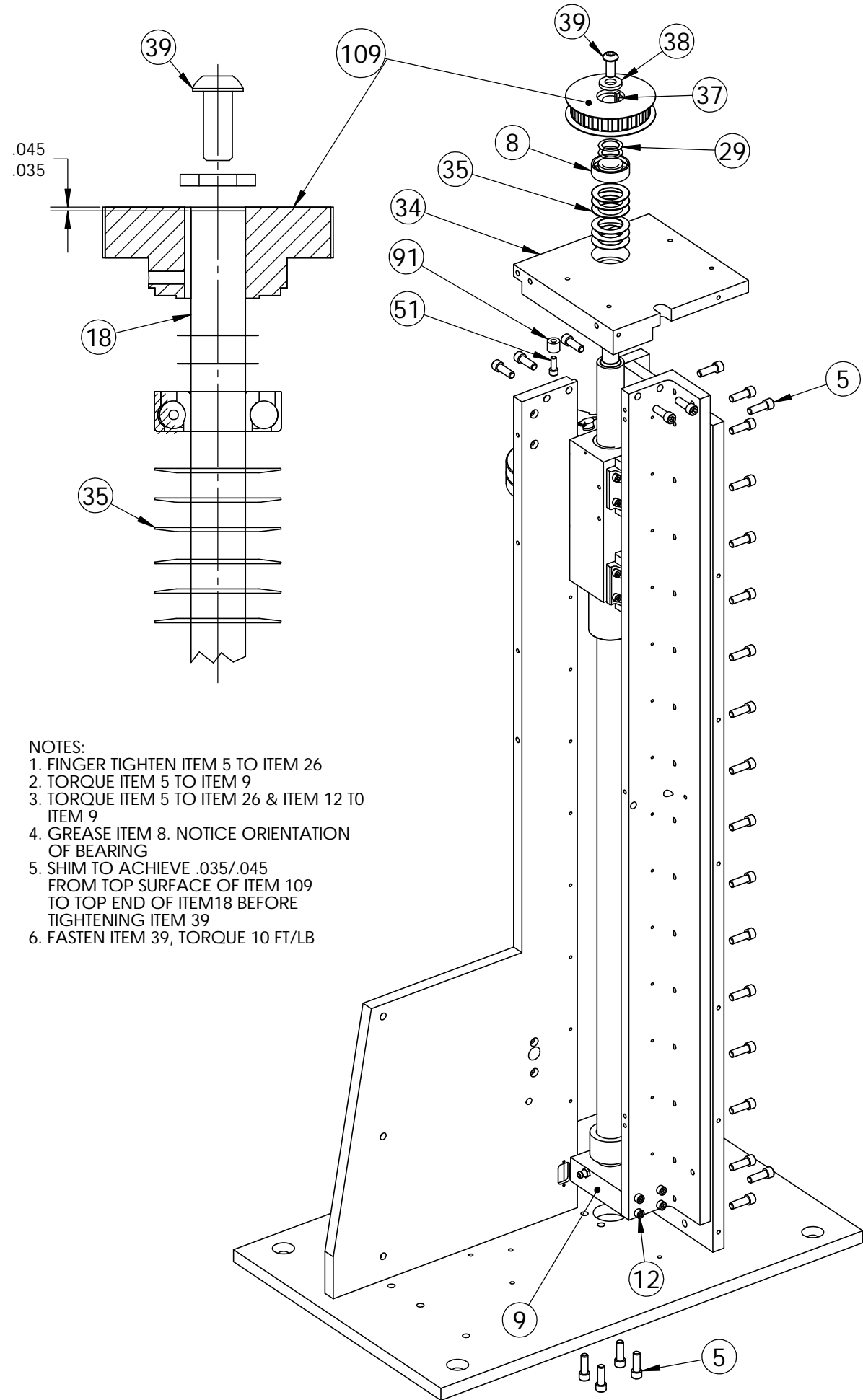
NOTES:
 1. SQUARE UP ASSEMBLY USING
 FIXTURE & PROCEDURE 060-4000-0035



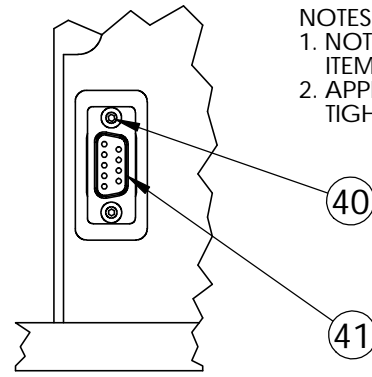
NOTES:
 1. ALIGN ITEMS 13, 22 & 26 TO ACHIEVE
 DIM .955 & .105
 2. GREASE ITEM 8
 3. NOTICE ORIENTATION OF BEARINGS,
 ITEM 8
 4. GREASE SURFACES OF ITEM 7 THEN
 FASTEN ITEM 6, TORQUE 40 FT/LB
 5. TIGHTEN FINGERTIGHT ITEM 9 TO 12
 6. TIGHTEN BALL NUT, ITEM 18 TO 40 FT/LB
 7. NOTICE ORIENTATION OF ITEM 15



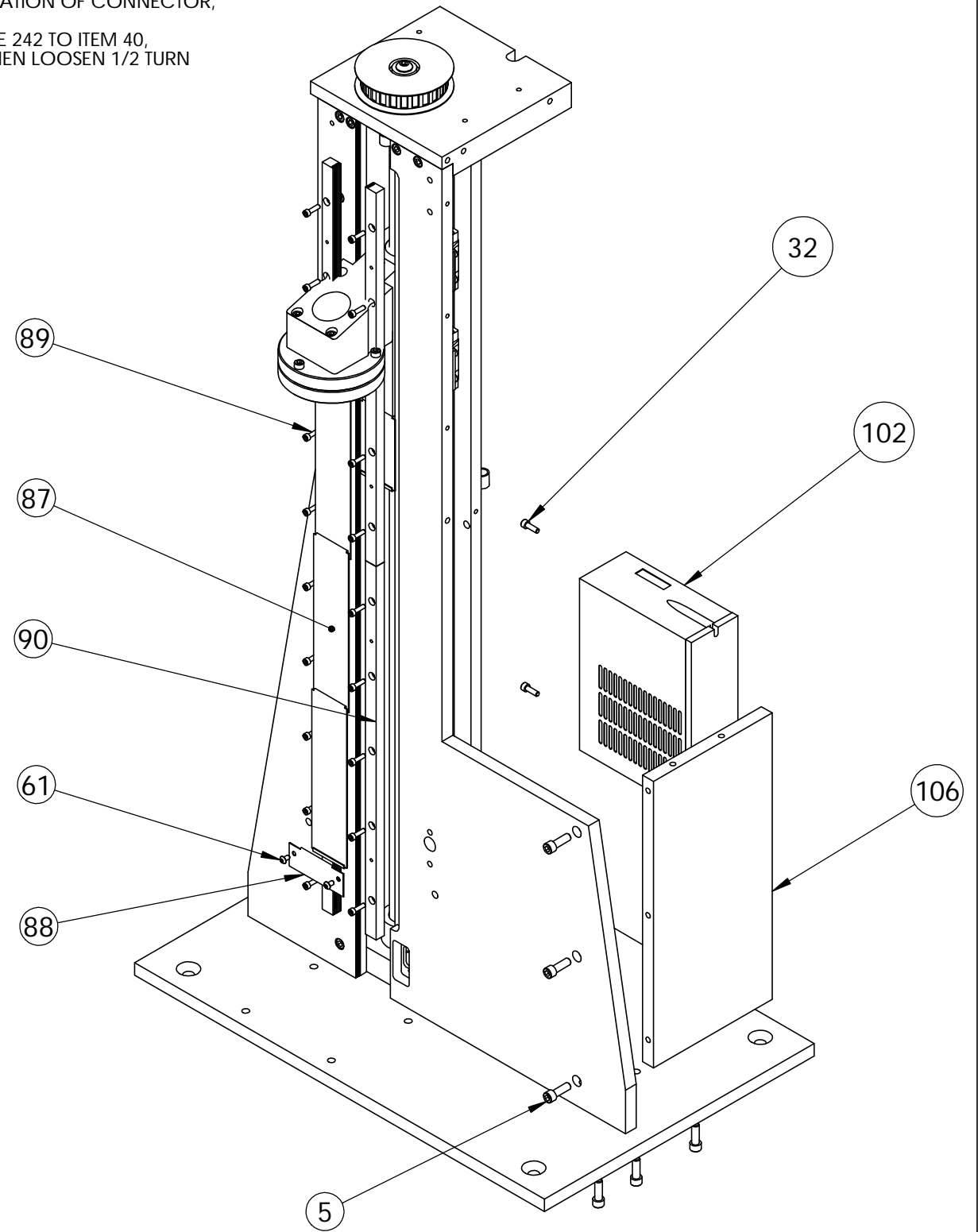
	LARSON SYSTEMS INC.	
	10073 Baltimore St. NE Mpls., MN 55449	PH. 763-780-2131 FAX. 763-780-2182
B SCALE: NONE	DWG. NO. 025-0000-0174-01F	SHEET 2 OF 7

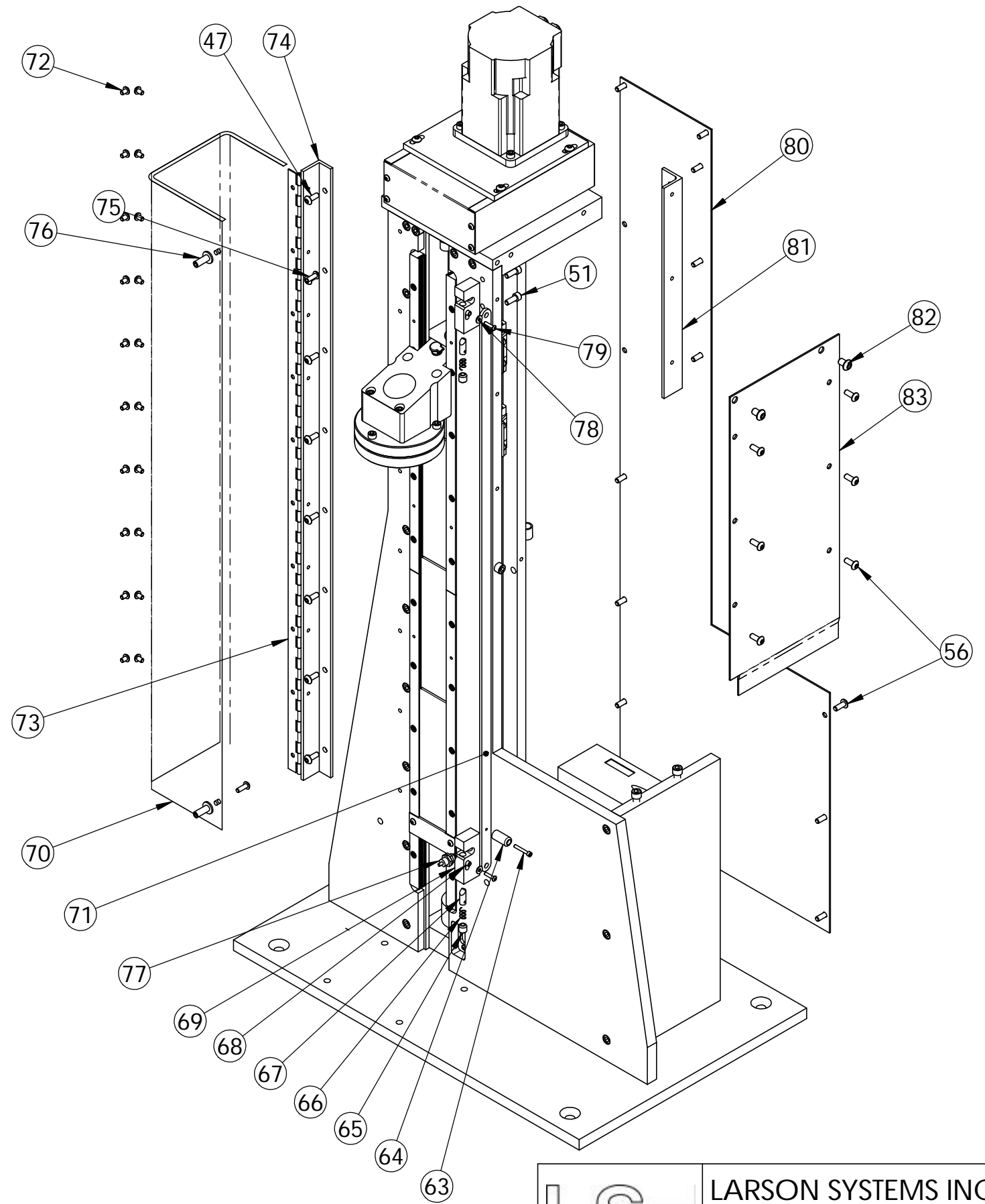
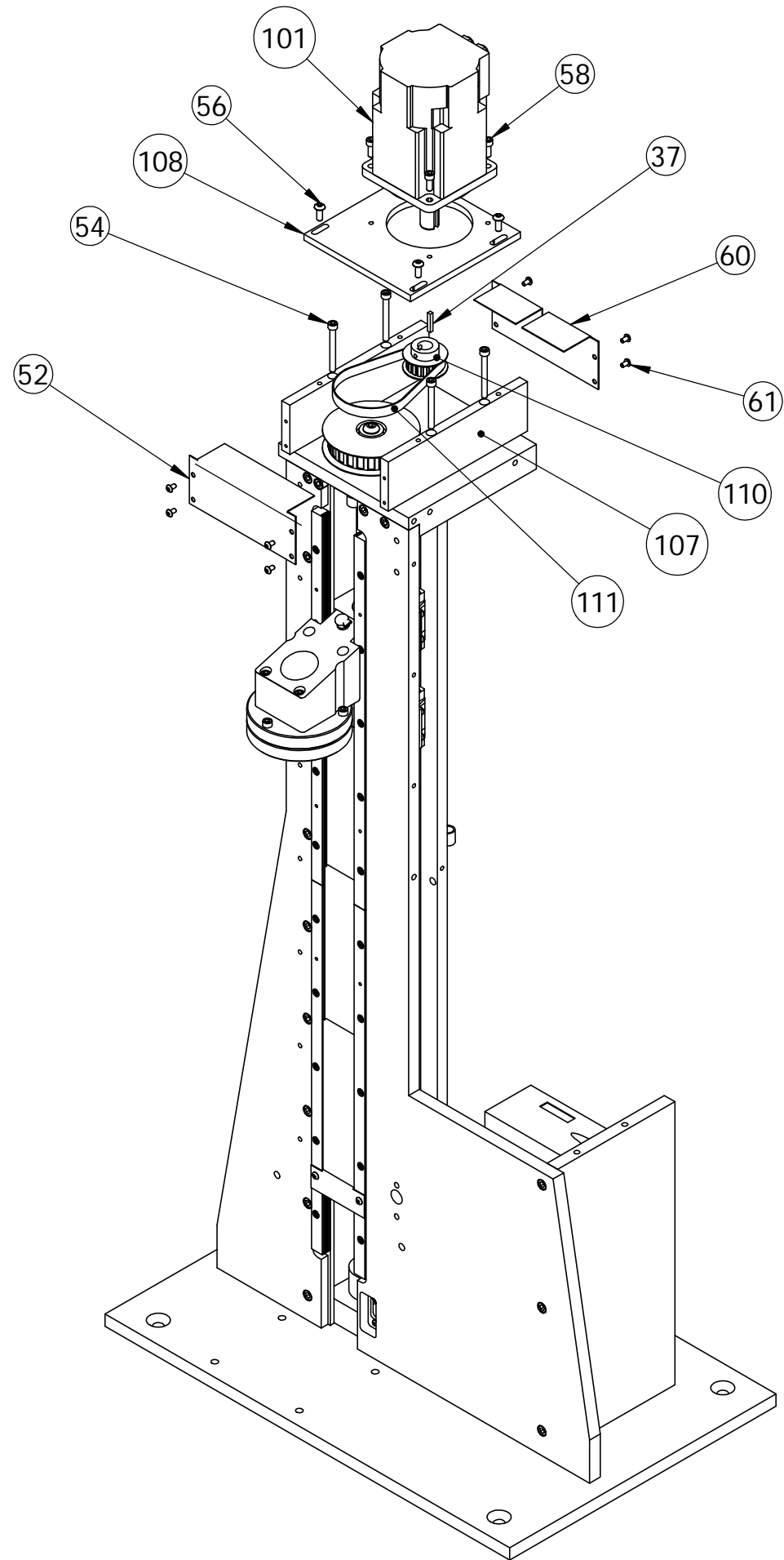


- NOTES:
1. FINGER TIGHTEN ITEM 5 TO ITEM 26
 2. TORQUE ITEM 5 TO ITEM 9
 3. TORQUE ITEM 5 TO ITEM 26 & ITEM 12 TO ITEM 9
 4. GREASE ITEM 8. NOTICE ORIENTATION OF BEARING
 5. SHIM TO ACHIEVE .035/.045 FROM TOP SURFACE OF ITEM 109 TO TOP END OF ITEM 18 BEFORE TIGHTENING ITEM 39
 6. FASTEN ITEM 39, TORQUE 10 FT/LB

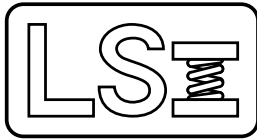


- NOTES:
1. NOTICE ORIENTATION OF CONNECTOR, ITEM 41
 2. APPLY LOCKTITE 242 TO ITEM 40, TIGHTENING, THEN LOOSEN 1/2 TURN





	LARSON SYSTEMS INC.	
	10073 Baltimore St. NE Mpls., MN 55449	PH. 763-780-2131 FAX. 763-780-2182
B	SCALE: NONE	DWG. NO. 025-0000-0174-01F
		SHEET 4 OF 7



025-0000-0174-01 F

Frame Assembly, 24 1,000 lb

Parts List

Rev	By	Date	Description
C	KMP	05-23-2005	Added Item 91 Travel Stop (to upper travel) and Item 92 Cable Clamp. change Item 51 Qty to (7) was (6) and Item 72 Qty 25 was 20. Change Item 45 to 025-1000-0406-00, -02 Power supply was 025-1000-0357-00, -01
D	KMP	05-17-2006	Change Item 41 25-1-304-01 was 25-1-0033-00, Item 42 25-1-0501-00 was 7-0-0035-00. Delete Item 36, 44, 45, 53, 55, 57, 59, 62, 84. Add Item 93 THRU 111
E	KMP	09-15-2006	New Flash Computer, Delete Items 42, 43, 49, 50, 85, 103, 105. Item 61 was Qty 10 and Item 89 was 13-0-0084-00,
F	KMP	05-15-2007	Update to New Servo Motor and Drive, move 200 lb Flash 11 onto 025-0-0174-10. Eliminate Linear Encoder delete Items 23, 24, 25, 27, 28, 30, 31, 94, 95, 96, 97, 98, 99, 100, 104. Item 52 was 18-0-1026-00, Item 60 was

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	018-0000-0176-04	Z	Base Plate		in.
2	1	018-0000-0171-03	G	LEFT SUPPORT, UT24		in.
3	1	018-0000-0339-01	J	Right Support, UT 24		in.
4	1	018-0000-0887-01	E	LEFT BACK SUPPORT, UT24		in.
5	56	013-0000-0032-00		1/4-20 X 3/4 SHCS		in.
6	1	013-2000-0104-00		Lock Nut		in.
7	1	013-2000-0105-00		Lock Washer		in.
8	3	013-2000-0090-00	A	Angular Contact Bearing		in.
9	1	018-0000-2055-00	D	UT Bearing Block		in.
10	1	018-0000-1009-00	E	Upper Platform, 5/16-18		in.
11	1	018-0000-0164-00	M	3.5" Upper Platform		in.
12	7	013-0000-0115-00		10-32 X 3/4 SHCS		in.
13	1	018-0000-2056-00	G	Upper Platform Mount		in.
14	4	018-0000-1732-03	B	10-32 Custom Screws for Platform Alignment		in.
15	1	013-1000-0025-00		CUP STYLE OIL HOLE COVER		in.
16	1	018-0000-2191-00	A	Ball Screw Wiper		in.
17	2	013-0000-0272-00		4-40 X 1/4 Socket Set Screw Cup Point		in.
18	1	013-5000-0134-01		HIWIN BALL SCREW/BALL NUT UT 24, 25MM		in.
19	2	013-2000-0230-00		Linear Bearing Block With 4 Hole Mount Screw From Bottom (ut)		in.
20	8	013-0000-0148-00		M4 X 14 mm SHCS		in.
21	14	013-0000-0188-00		M3-0.5 X 16 mm SHCS		in.
22	1	013-2000-0072-02		24" Linear Bearing Rail (15x820 mm)(UT, STAR)		in.
26	1	018-0000-0880-01	F	Upper Platform Mount, UT 24		in.
29	AR	013-2000-0077-00		.005 Stainless Steel Shim Washer		in.
32	2	013-0000-0181-00		8-32 X 1/2 SHCS		in.
33	1	013-1000-0012-00		1/4-28 Grease Fitting		in.
34	1	018-0000-2054-00	E	UT Top Support Plate		in.
35	6	013-2000-0203-00		Belville Washer, OD 1.326, ID .882		in.
37	1	018-0000-1327-02	C	Key 1/8 X 1/8 X .750		in.
38	1	013-2000-0202-00		Thrust Washer		in.

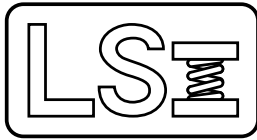
Approved by: 

Date: May 25, 2007

SEE ATTACHED 4 DRAWINGS

Printed on 05-25-2007, 9:41:44 AM by DAL

Page 5 of 7



025-0000-0174-01 F

Frame Assembly, 24 1,000 lb

Parts List

Rev	By	Date	Description
C	KMP	05-23-2005	Added Item 91 Travel Stop (to upper travel) and Item 92 Cable Clamp. change Item 51 Qty to (7) was (6) and Item 72 Qty 25 was 20. Change Item 45 to 025-1000-0406-00, -02 Power supply was 025-1000-0357-00, -01
D	KMP	05-17-2006	Change Item 41 25-1-304-01 was 25-1-0033-00, Item 42 25-1-0501-00 was 7-0-0035-00. Delete Item 36, 44, 45, 53, 55, 57, 59, 62, 84. Add Item 93 THRU 111
E	KMP	09-15-2006	New Flash Computer, Delete Items 42, 43, 49, 50, 85, 103, 105. Item 61 was Qty 10 and Item 89 was 13-0-0084-00,
F	KMP	05-15-2007	Update to New Servo Motor and Drive, move 200 lb Flash 11 onto 025-0-0174-10. Eliminate Linear Encoder delete Items 23, 24, 25, 27, 28, 30, 31, 94, 95, 96, 97, 98, 99, 100, 104. Item 52 was 18-0-1026-00, Item 60 was

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
39	1	013-0000-0114-00		5/16-18 X 3/4 BHSCS		in.
40	2	013-0000-0020-00		4-40 X 1/4 Button Head Cap Screw		in.
41	Ref	025-1000-0304-01	D	Smart Cell Cable Assembly,FLASH		in.
47	8	013-0000-0097-00		10-32 X 1/2 BHSCS		in.
50	2	013-0000-0010-00		4-40 X 3/8 SHCS		in.
51	7	013-0000-0196-00		10-32 X 1/2 SHCS		in.
52	1	018-0000-1026-04		GEAR MOUNT FRONT END COVER, Flash 11- 24 1,000 lb		in.
54	4	013-0000-0074-00		10-32 X 1 3/4 SHCS		in.
56	24	013-0000-0026-00		10-24 X 1/2 BHSCS		in.
58	4	013-0000-0246-00		10-24 X 5/8 SHCS		in.
60	1	018-0000-1026-03		GEAR MOUNT END COVER, Flash 11- 24 1,000 lb		in.
61	8	013-0000-0077-00		6-32 X 1/4 Button Head Cap Screw		in.
63	1	013-0000-0291-00		4-40 X 3/4 SHCS		in.
64	1	018-0000-2072-00	B	LATCH RELEASE KNOB		in.
65	2	013-0000-0318-00		5/16-18 X 5/16 FTDT SSS Self Locking		in.
66	2	013-0000-0319-00		SPRING .240Ø x .500		in.
67	2	018-0000-2063-00	A	LATCH PIN		in.
68	2	018-0000-2069-00	C	Latch Spacer		in.
69	2	018-0000-2060-01		Shield Latch		in.
70	1	018-0000-2059-01		UT 24 Shield		in.
71	1	018-0000-2062-01		Latch Release, UT 24		in.
72	35	013-0000-0028-00		8-32 X 1/4 BHSCS		in.
73	1	018-0000-2065-01		Shield Hinge, UT24		in.
74	1	018-0000-2064-01		HINGE MOUNT, UT 24		in.
75	2	013-0000-0029-00		8-32 X 1/2 Button Head Cap Screw		in.
76	2	018-0000-2061-00	B	Shield Pin		in.
77	Ref	025-1000-0395-00	A	Cable UT Door Interlock Switch		in.
78	2	013-2000-0131-00		#4 FLAT WASHER		in.
79	2	013-0000-0018-00		4-40 X 1/2 BHSCS		in.
80	1	018-0000-0920-00	E	Back Cover UT24		in.

Approved by:

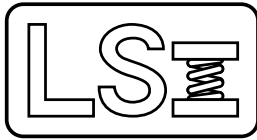
Date:

May 25, 2007

SEE ATTACHED 4 DRAWINGS

Printed on 05-25-2007, 9:41:44 AM by DAL

Page 6 of 7



025-0000-0174-01 F
Frame Assembly, 24 1,000 lb

Parts List

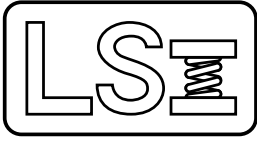
Rev	By	Date	Description
C	KMP	05-23-2005	Added Item 91 Travel Stop (to upper travel) and Item 92 Cable Clamp. change Item 51 Qty to (7) was (6) and Item 72 Qty 25 was 20. Change Item 45 to 025-1000-0406-00, -02 Power supply was 025-1000-0357-00, -01
D	KMP	05-17-2006	Change Item 41 25-1-304-01 was 25-1-0033-00, Item 42 25-1-0501-00 was 7-0-0035-00. Delete Item 36, 44, 45, 53, 55, 57, 59, 62, 84. Add Item 93 THRU 111
E	KMP	09-15-2006	New Flash Computer, Delete Items 42, 43, 49, 50, 85, 103, 105. Item 61 was Qty 10 and Item 89 was 13-0-0084-00,
F	KMP	05-15-2007	Update to New Servo Motor and Drive, move 200 lb Flash 11 onto 025-0-0174-10. Eliminate Linear Encoder delete Items 23, 24, 25, 27, 28, 30, 31, 94, 95, 96, 97, 98, 99, 100, 104. Item 52 was 18-0-1026-00, Item 60 was

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
81	1	018-0000-0923-00	A	SIDE COVER PLATE SUPPORT		in.
82	2	013-0000-0128-00		1/4-20 X 3/8 BHSCS		in.
83	1	018-0000-0922-00	C	SIDE COVER PLATE, UT24-50		in.
86	1	018-0000-2717-01		Mount Guard, Flash 11 - 24		in.
87	2	018-0000-2717-02		Slide Guard, Flash 11 -24		in.
88	1	018-0000-2717-03		Guard Stop, Flash 24		in.
89	20	013-0000-0157-00		6-32 X 3/8 SHCS		in.
90	4	018-0000-2727-00		Guard Rail, Flash 11 - 24		in.
91	1	018-0000-2738-00		Travel Stop, Flash 24		in.
92	5	013-3000-0017-00		Cable Clamp, 3/8 Dia.		in.
93	1	018-0000-2728-00	A	Ball Screw Spacer, Flash 11 & 24		in.
101	Ref	014-2000-0028-00		AKM41 SERVO MOTOR		in.
102	Ref	011-3000-0018-00		S200 SERVO MOTOR DRIVE, 3 AMP LIMIT		in.
106	1	018-0000-0173-05		Right Back Support, Flash		in.
107	2	018-0000-1027-01	A	Motor Stand-off (2000 Lb Motor)		in.
108	1	018-0000-1028-00	B	MOTOR MOUNTING PLATE		in.
109	1	018-0000-1029-08	H	Pulley(13-5-149)(ø.596/.595) 1000 LB Pulley		in.
110	1	018-0000-1029-09	H	Pulley(13-5-150)(.626/.625) 1000LB Motor pulley		in.
111	1	013-5000-0148-00		Timing Belt 33 Th		in.

Approved by: 

Date: May 25, 2007

SEE ATTACHED 4 DRAWINGS



050-0000-0127-00 C
FLASH 24 - 200 lb

Parts List

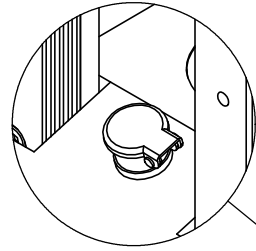
Rev	By	Date	Description
	DAL	09-01-2004	
A	KMP	08-21-2006	Item 2 was 025-0000-0431-00
B	KMP	05-18-2007	Item 1 was 25-0-0174-00 and Item 5 was 25-2-0090-10
C	DAL	07-19-2010	del 018-0000-2477-00, 013-0000-0231-00, add 059-0000-0009-00

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	025-0000-0174-11		Frame Assembly, 24 200 lb		in.
2	1	025-0000-0431-10	B	FLASH - Computer Assembly		in.
3	1	025-2000-0090-00	E	Electrical Schematic, FLASH 11/24 200 lb stepper, 120 / 240 VAC		in.
4	1	060-1000-0066-00	C	User Manual - FLASH Series 11 & 24		in.
5	1	060-2000-0024-01		Parts List - FLASH 24		in.
6	1	025-6000-0021-00	E	Sticker Assembly - FLASH 24		in.
7	1	059-0000-0009-00	C	Shipping Crate -Flash 24		in.

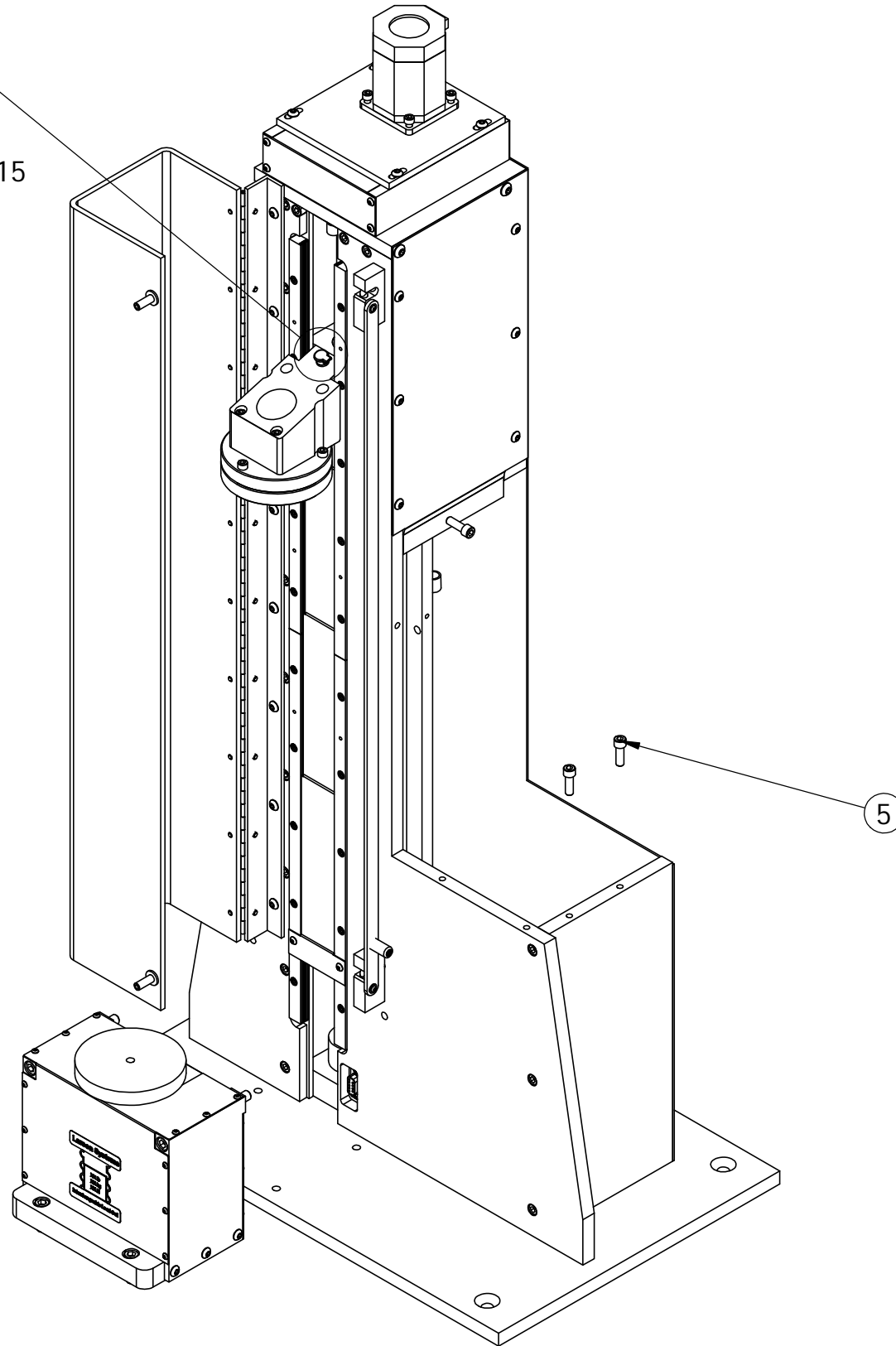
Approved by: 

Date: July 20, 2010

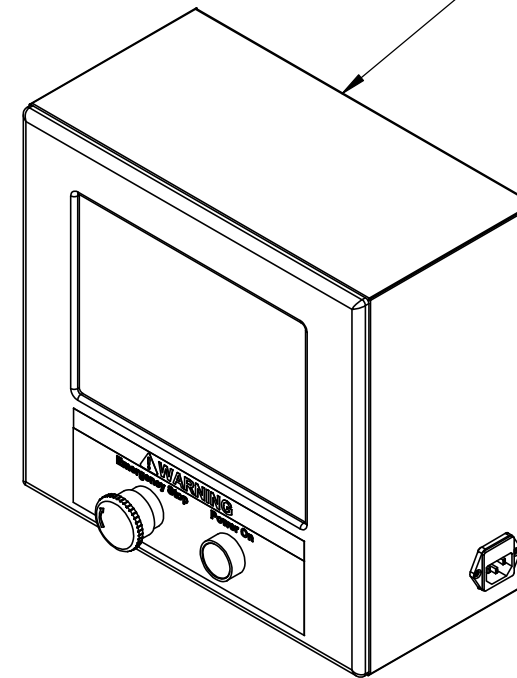
REV	DATE	DESCRIPTION	DRW	APP
		SEE SHEET 5		



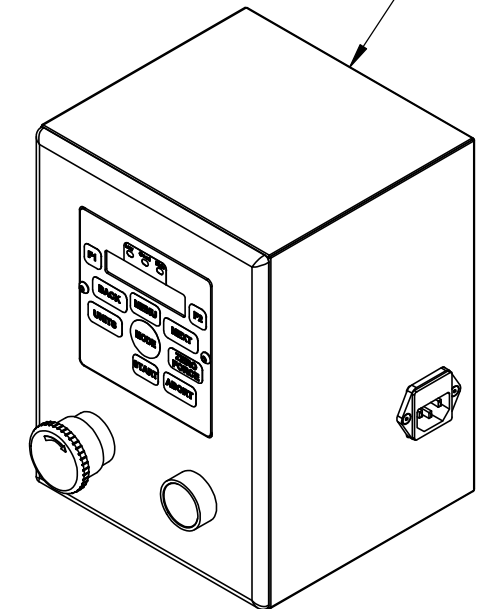
NOTE: 1. ADD OIL TO ITEM 15
AFTER ASSY



FLASH
REF. ONLY



FLASHLITE
REF. ONLY



UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
.XX ± .01
.XXX ± .005

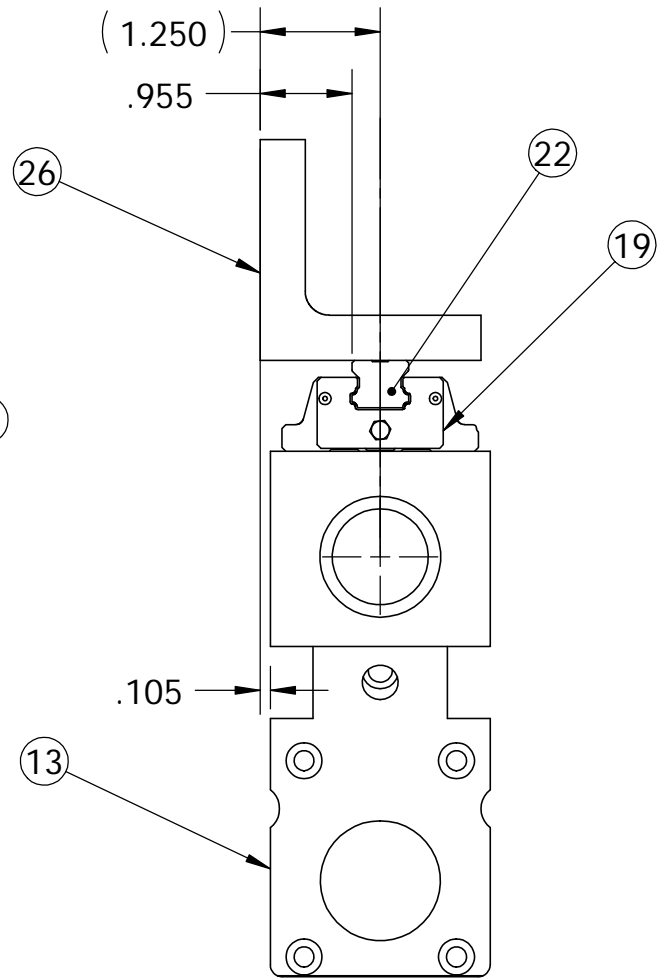
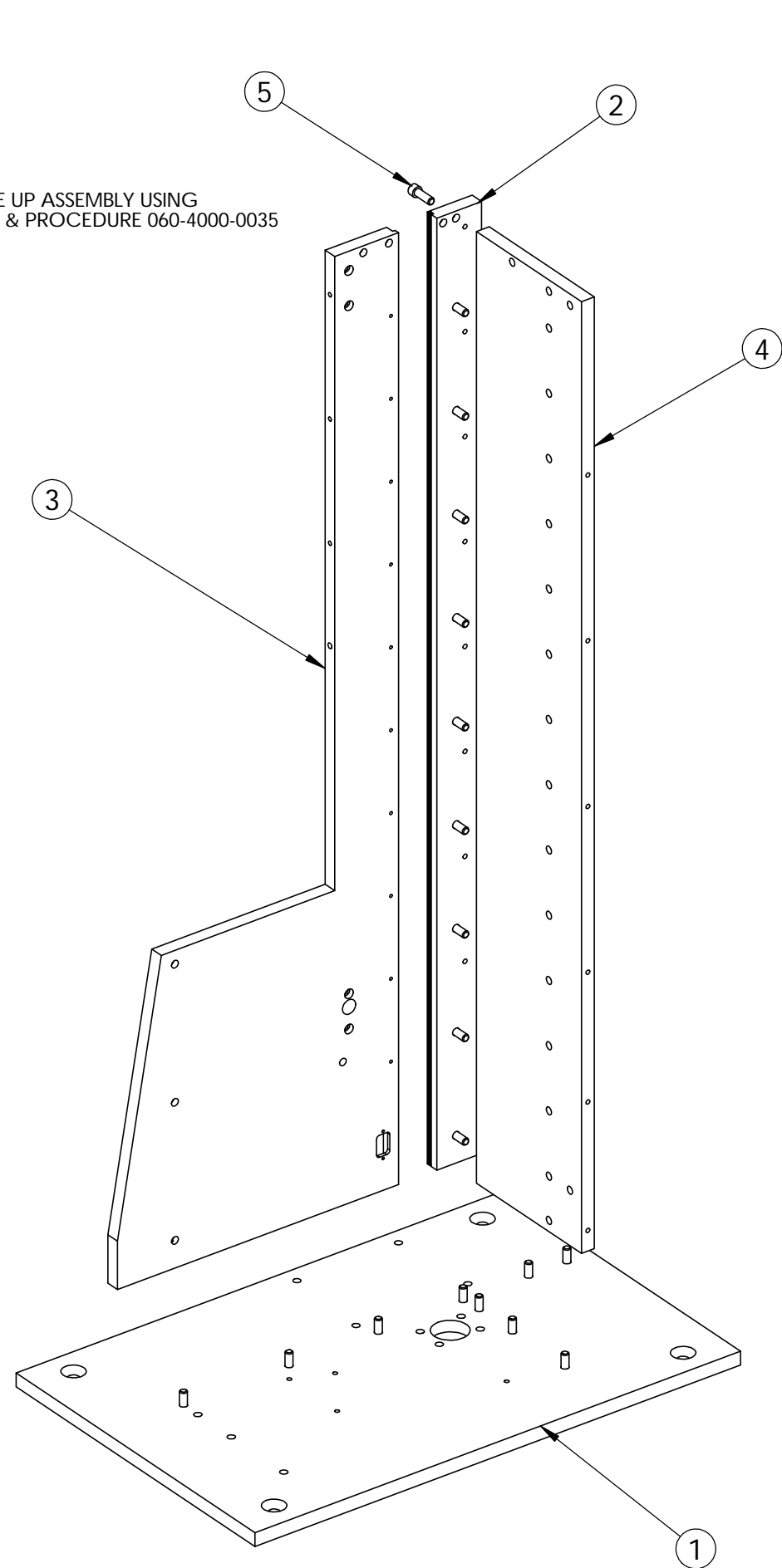


LARSON SYSTEMS INC.

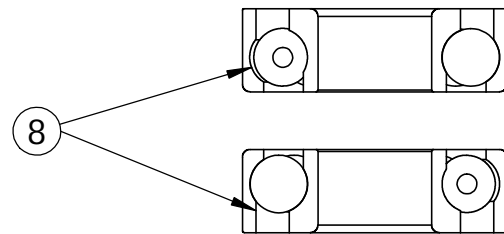
10073 Baltimore St. NE PH. 763-780-2131
Mpls., MN 55449 FAX. 763-780-2182

MATERIAL	APPROVALS	DATE	FRAME ASSEMBLY 24 200 lb	
FINISH	DRAWN MEM	12-03-03		
HEAT TREAT	APP.		B	DWG. NO. 025-0000-0174-11
	APP.		SCALE: NONE	SHEET 1 OF 7

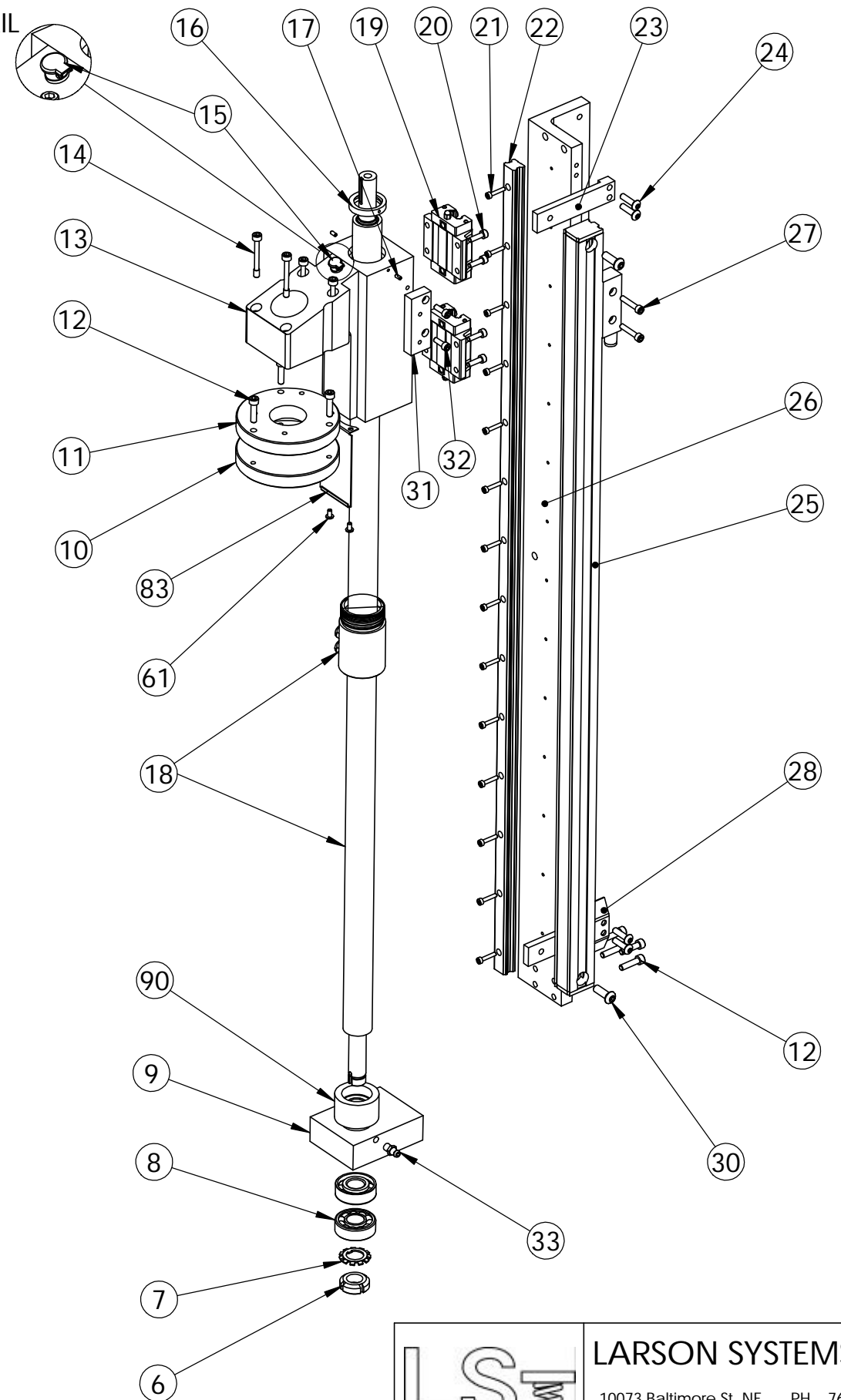
NOTES:
 1. SQUARE UP ASSEMBLY USING
 FIXTURE & PROCEDURE 060-4000-0035



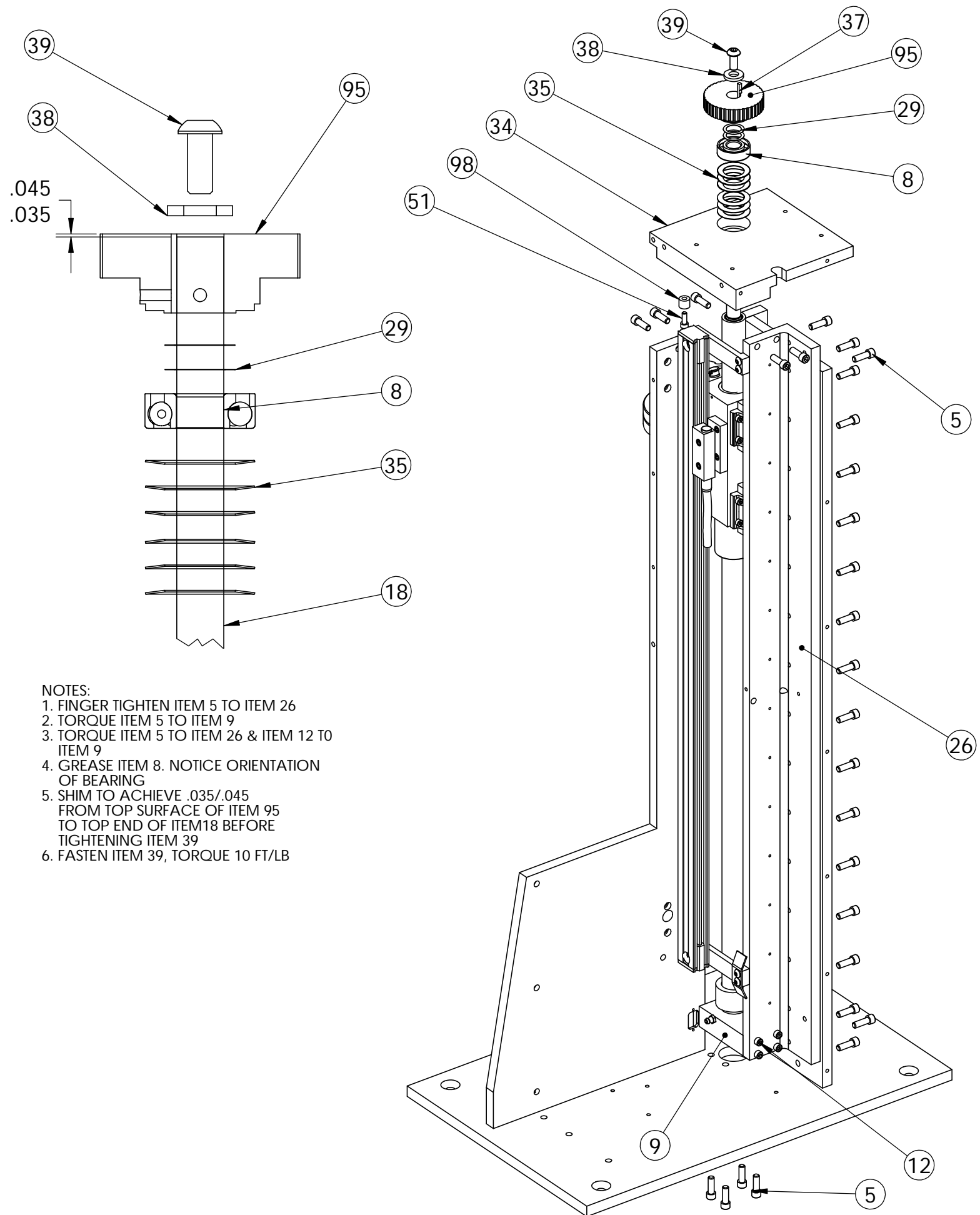
NOTES:
 1. ALIGN ITEMS 13, 22 & 26 TO ACHIEVE
 DIM .955 & .105
 2. GREASE ITEM 8
 3. NOTICE ORIENTATION OF BEARINGS,
 ITEM 8
 4. GREASE SURFACES OF ITEM 7 THEN
 FASTEN ITEM 6, TORQUE 40 FT/LB
 5. TIGHTEN FINGERTIGHT ITEM 9 TO 12
 6. TIGHTEN BALL NUT, ITEM 18 TO 40 FT/LB
 7. NOTICE ORIENTATION OF ITEM 15



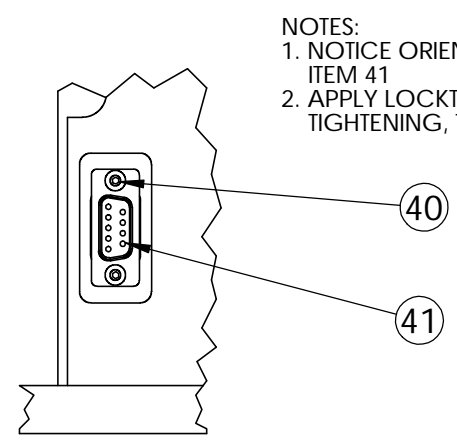
DETAIL



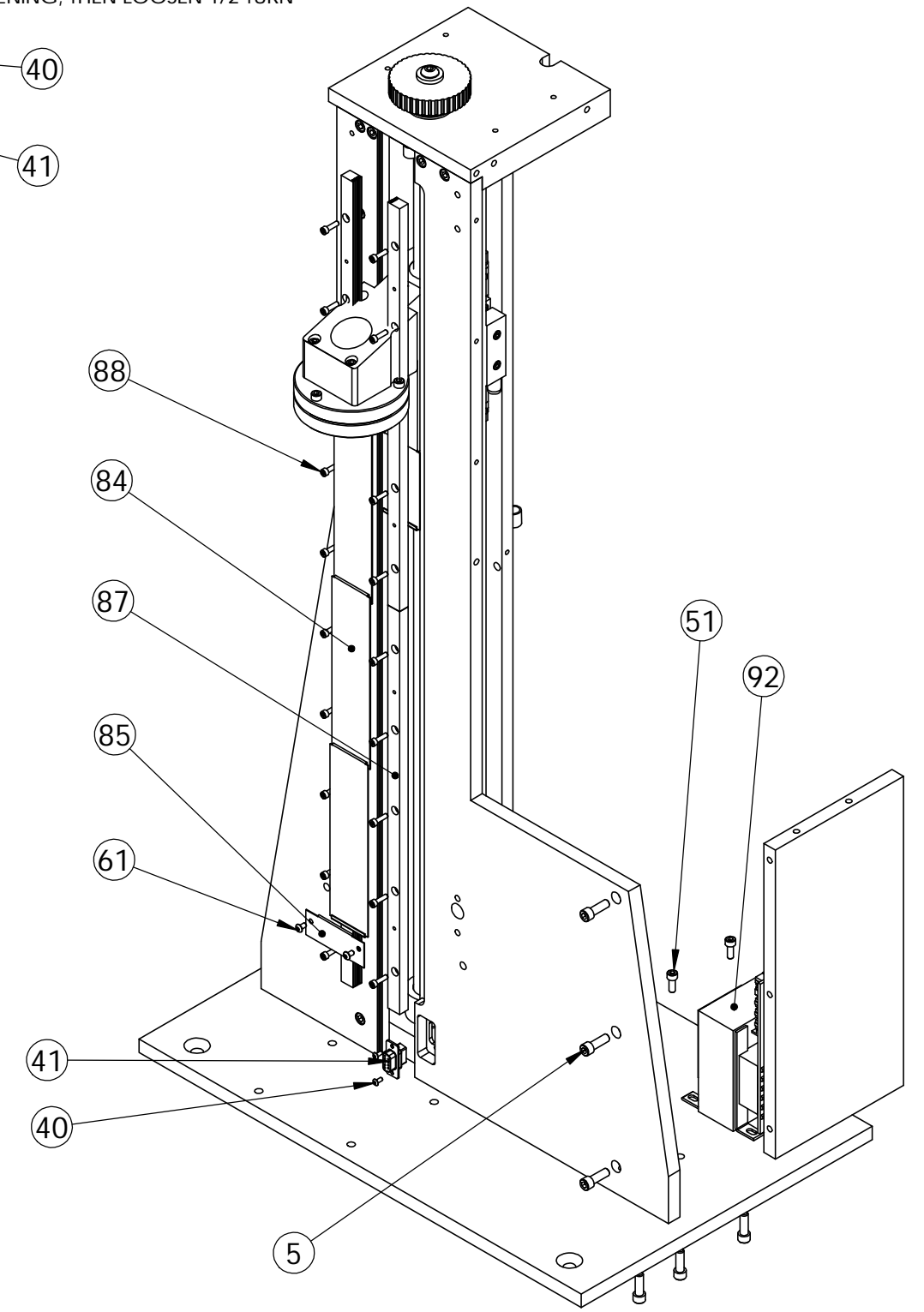
	LARSON SYSTEMS INC.	
	10073 Baltimore St. NE Mpls., MN 55449	PH. 763-780-2131 FAX. 763-780-2182
B	SCALE: NONE	DWG. NO. 025-0000-0174-11
		SHEET 2 OF 7



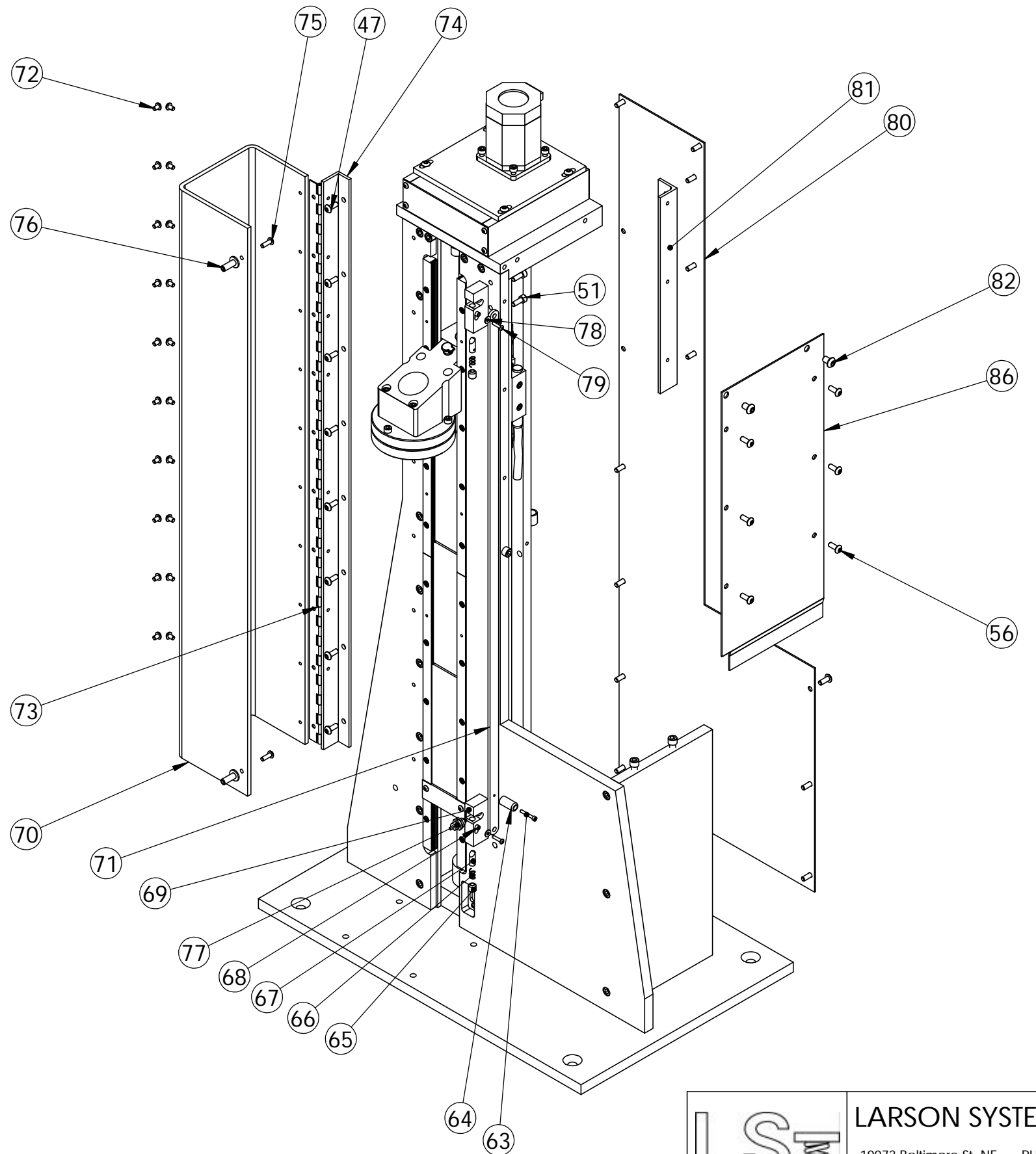
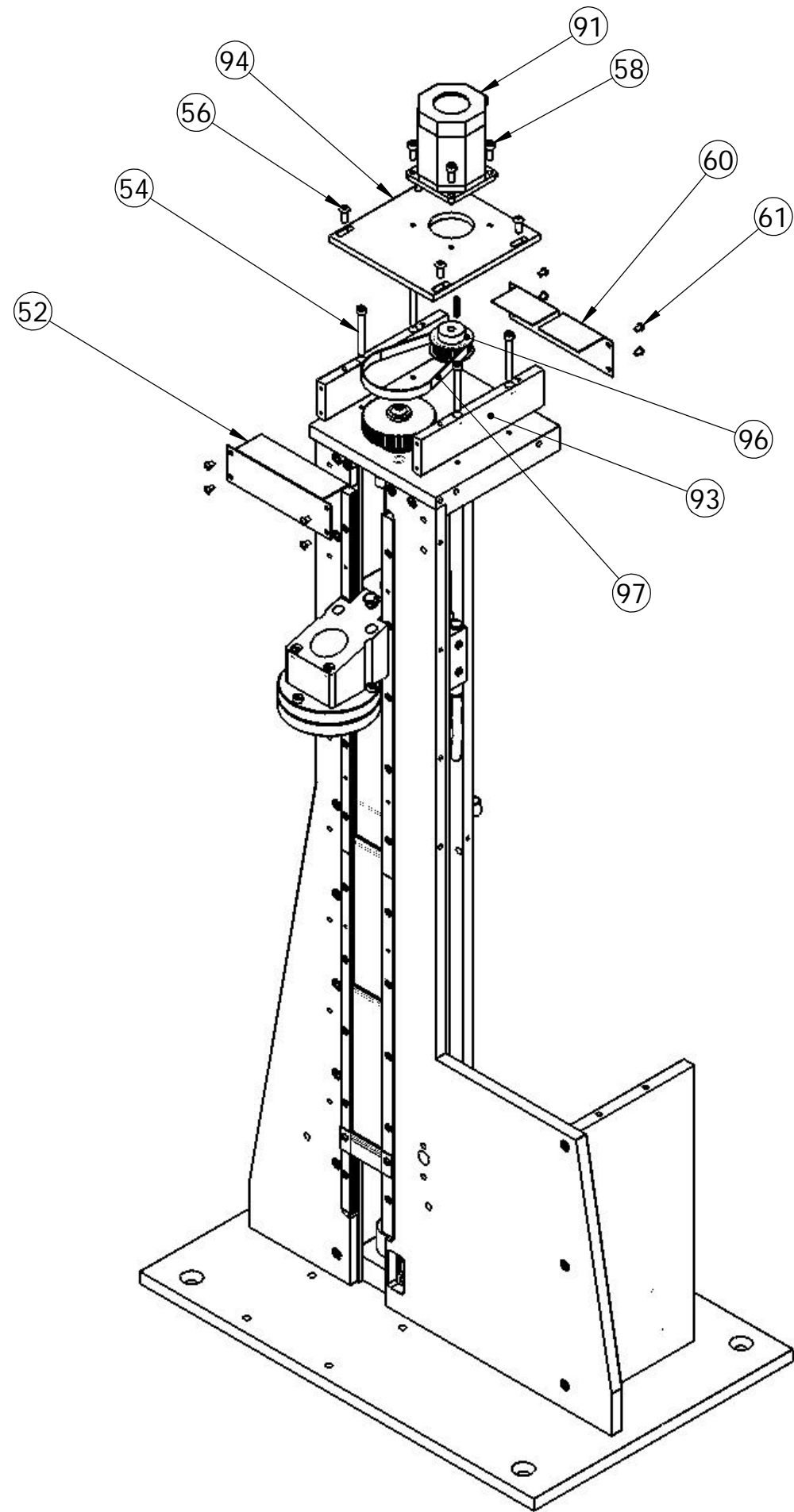
- NOTES:
 1. FINGER TIGHTEN ITEM 5 TO ITEM 26
 2. TORQUE ITEM 5 TO ITEM 9
 3. TORQUE ITEM 5 TO ITEM 26 & ITEM 12 TO ITEM 9
 4. GREASE ITEM 8. NOTICE ORIENTATION OF BEARING
 5. SHIM TO ACHIEVE .035/.045 FROM TOP SURFACE OF ITEM 95 TO TOP END OF ITEM 18 BEFORE TIGHTENING ITEM 39
 6. FASTEN ITEM 39, TORQUE 10 FT/LB



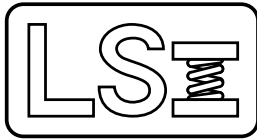
- NOTES:
 1. NOTICE ORIENTATION OF CONNECTOR, ITEM 41
 2. APPLY LOCKTITE 242 TO ITEM 40, TIGHTENING, THEN LOOSEN 1/2 TURN



	LARSON SYSTEMS INC.	
	10073 Baltimore St. NE Mpls., MN 55449	PH. 763-780-2131 FAX. 763-780-2182
B SCALE: NONE	DWG. NO. 025-0000-0174-11	SHEET 3 OF 7



	LARSON SYSTEMS INC.	
	10073 Baltimore St. NE Mpls., MN 55449	PH. 763-780-2131 FAX. 763-780-2182
B	SCALE: NONE	DWG. NO. 025-0000-0174-11
		SHEET 4 OF 7



025-0000-0174-11

Frame Assembly, 24 200 lb

Parts List

Rev	By	Date	Description
	KMP	05-08-2007	

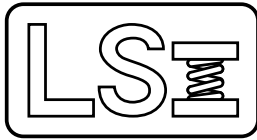
Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	018-0000-0176-04	Z	Base Plate		in.
2	1	018-0000-0171-03	G	LEFT SUPPORT, UT24		in.
3	1	018-0000-0339-01	J	Right Support, UT 24		in.
4	1	018-0000-0887-01	E	LEFT BACK SUPPORT, UT24		in.
5	56	013-0000-0032-00		1/4-20 X 3/4 SHCS		in.
6	1	013-2000-0104-00		Lock Nut		in.
7	1	013-2000-0105-00		Lock Washer		in.
8	3	013-2000-0090-00	A	Angular Contact Bearing		in.
9	1	018-0000-2055-00	D	UT Bearing Block		in.
10	1	018-0000-1009-00	E	Upper Platform, 5/16-18		in.
11	1	018-0000-0164-00	M	3.5" Upper Platform		in.
12	7	013-0000-0115-00		10-32 X 3/4 SHCS		in.
13	1	018-0000-2056-00	G	Upper Platform Mount		in.
14	4	018-0000-1732-03	B	10-32 Custom Screws for Platform Alignment		in.
15	1	013-1000-0025-00		CUP STYLE OIL HOLE COVER		in.
16	1	018-0000-2191-00	A	Ball Screw Wiper		in.
17	2	013-0000-0272-00		4-40 X 1/4 Socket Set Screw Cup Point		in.
18	1	013-5000-0134-01		HIWIN BALL SCREW/BALL NUT UT 24, 25MM		in.
19	2	013-2000-0230-00		Linear Bearing Block With 4 Hole Mount Screw From Bottom (ut)		in.
20	8	013-0000-0148-00		M4 X 14 mm SHCS		in.
21	14	013-0000-0188-00		M3-0.5 X 16 mm SHCS		in.
22	1	013-2000-0072-02		24" Linear Bearing Rail (15x820 mm)(UT, STAR)		in.
23	2	018-0000-2057-00	A	SCALE MOUNTING PLATE		in.
24	4	013-0000-0125-00		10-24 X 3/4 BHSCS		in.
25	Ref	025-1000-0243-10	M	ENCODER FOR FLASH 24, STD RESOLUTION		in.
26	1	018-0000-0880-01	F	Upper Platform Mount, UT 24		in.
27	2	013-0000-0295-00		8-32 X 7/8 SHCS		in.
28	1	018-0000-1016-00	A	CABLE GUARD		in.
29	AR	013-2000-0077-00		.005 Stainless Steel Shim Washer		in.
30	2	013-0000-0282-00		1/4-20 X 3/4 BHSCS		in.

Approved by:

Date:

May 29, 2007

SEE ATTACHED 4 DRAWINGS



025-0000-0174-11

Frame Assembly, 24 200 lb

Parts List

Rev	By	Date	Description
	KMP	05-08-2007	

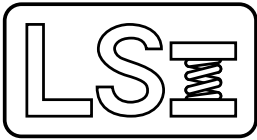
Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
31	1	018-0000-2058-00	B	READER HEAD MOUNT		in.
32	4	013-0000-0181-00		8-32 X 1/2 SHCS		in.
33	1	013-1000-0012-00		1/4-28 Grease Fitting		in.
34	1	018-0000-2054-00	E	UT Top Support Plate		in.
35	6	013-2000-0203-00		Belville Washer, OD 1.326, ID .882		in.
37	1	018-0000-1327-02	C	Key 1/8 X 1/8 X .750		in.
38	1	013-2000-0202-00		Thrust Washer		in.
39	1	013-0000-0114-00		5/16-18 X 3/4 BHSCS		in.
40	2	013-0000-0020-00		4-40 X 1/4 Button Head Cap Screw		in.
41	Ref	025-1000-0304-01	D	Smart Cell Cable Assembly,FLASH		in.
47	8	013-0000-0097-00		10-32 X 1/2 BHSCS		in.
51	6	013-0000-0196-00		10-32 X 1/2 SHCS		in.
52	1	018-0000-1026-00	B	GEAR MOUNT END COVER		in.
54	4	013-0000-0074-00		10-32 X 1 3/4 SHCS		in.
56	24	013-0000-0026-00		10-24 X 1/2 BHSCS		in.
58	4	013-0000-0246-00		10-24 X 5/8 SHCS		in.
60	1	018-0000-1026-01	B	GEAR MOUNT END COVER		in.
61	12	013-0000-0077-00		6-32 X 1/4 Button Head Cap Screw		in.
63	1	013-0000-0291-00		4-40 X 3/4 SHCS		in.
64	1	018-0000-2072-00	B	LATCH RELEASE KNOB		in.
65	2	013-0000-0318-00		5/16-18 X 5/16 FTDT SSS Self Locking		in.
66	2	013-0000-0319-00		SPRING .240Ø x .500		in.
67	2	018-0000-2063-00	A	LATCH PIN		in.
68	2	018-0000-2069-00	C	Latch Spacer		in.
69	2	018-0000-2060-01		Shield Latch		in.
70	1	018-0000-2059-01		UT 24 Shield		in.
71	1	018-0000-2062-01		Latch Release, UT 24		in.
72	29	013-0000-0028-00		8-32 X 1/4 BHSCS		in.
73	1	018-0000-2065-01		Shield Hinge, UT24		in.
74	1	018-0000-2064-01		HINGE MOUNT, UT 24		in.

Approved by:

Date:

May 29, 2007

SEE ATTACHED 4 DRAWINGS



025-0000-0174-11

Frame Assembly, 24 200 lb

Parts List

Rev	By	Date	Description
	KMP	05-08-2007	

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
75	2	013-0000-0029-00		8-32 X 1/2 Button Head Cap Screw		in.
76	2	018-0000-2061-00	B	Shield Pin		in.
77	Ref	025-1000-0395-00	A	Cable UT Door Interlock Switch		in.
78	2	013-2000-0131-00		#4 FLAT WASHER		in.
79	2	013-0000-0018-00		4-40 X 1/2 BHSCS		in.
80	1	018-0000-0920-00	E	Back Cover UT24		in.
81	1	018-0000-0923-00	A	SIDE COVER PLATE SUPPORT		in.
82	1	013-0000-0128-00		1/4-20 X 3/8 BHSCS		in.
83	1	018-0000-2717-01		Mount Guard, Flash 11 - 24		in.
84	1	018-0000-2717-02		Slide Guard, Flash 11 -24		in.
85	1	018-0000-2717-03		Guard Stop, Flash 24		in.
86	1	018-0000-0922-00	C	SIDE COVER PLATE, UT24-50		in.
87	4	018-0000-2727-00		Guard Rail, Flash 11 - 24		in.
88	20	013-0000-0157-00		6-32 X 3/8 SHCS		in.
89	5	013-3000-0017-00		Cable Clamp, 3/8 Dia.		in.
90	1	018-0000-2728-00	A	Ball Screw Spacer, Flash 11 & 24		in.
91	Ref	025-1000-0173-03	P	200 lb UT Motor Assembly, UT11		in.
92	Ref	025-1000-0406-00	D	Motor Power / Drive Assembly (200 LB UNIT)(Flash)		in.
93	2	018-0000-1027-00	B	MOTOR STAND-OFF		in.
94	1	018-0000-1028-01	A	SMALL MOTOR MOUNTING PLATE		in.
95	1	018-0000-1029-04	H	Pulley (13-5-60), Steel Only(.596/.595ø)		in.
96	1	018-0000-1029-06	H	PULLEY(13-5-61) (.25Ø STK)		in.
97	1	013-5000-0031-00		Timing Belt - Positive Drive 110XL		in.
98	1	018-0000-2738-00		Travel Stop, Flash 24		in.

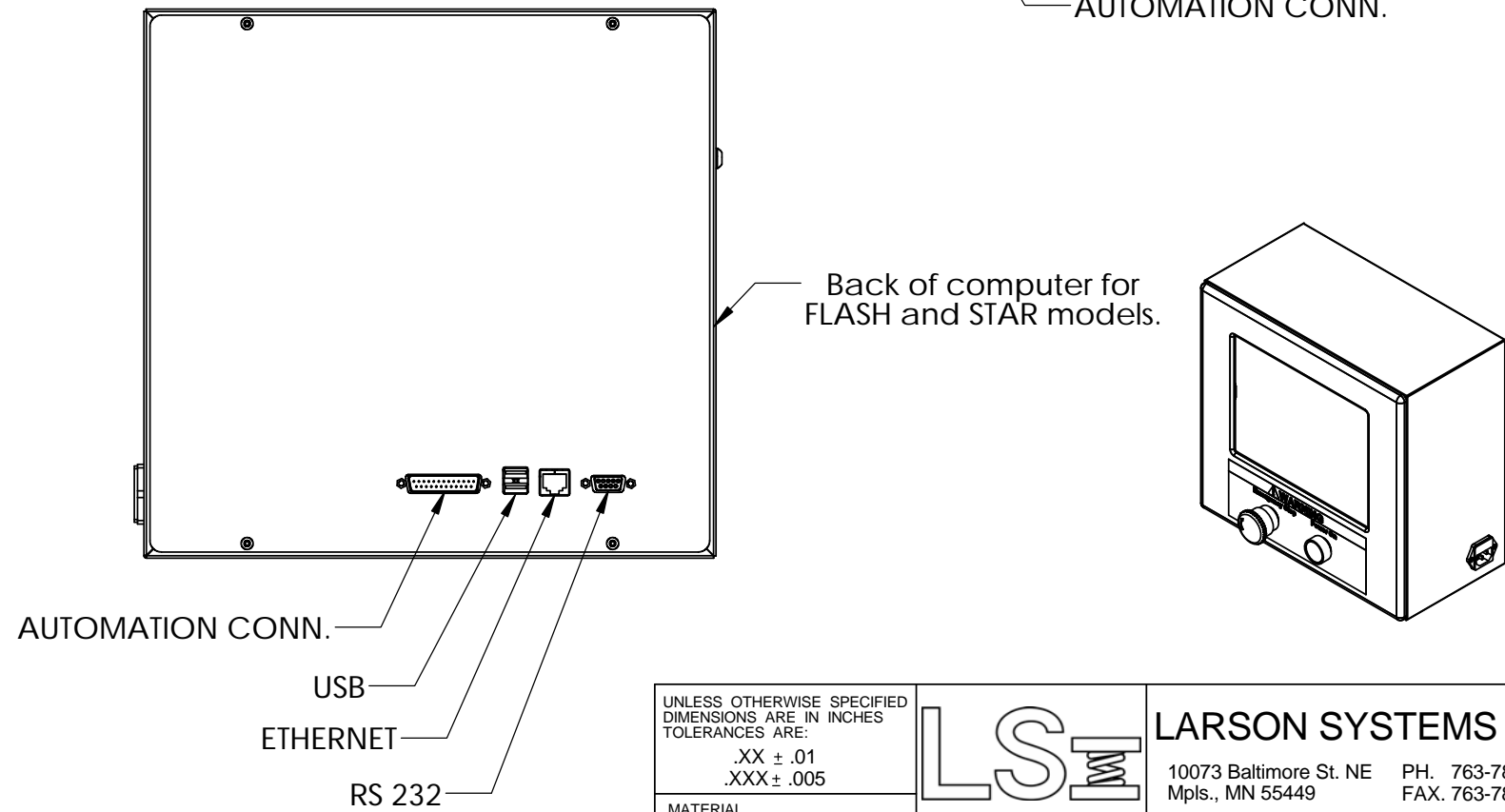
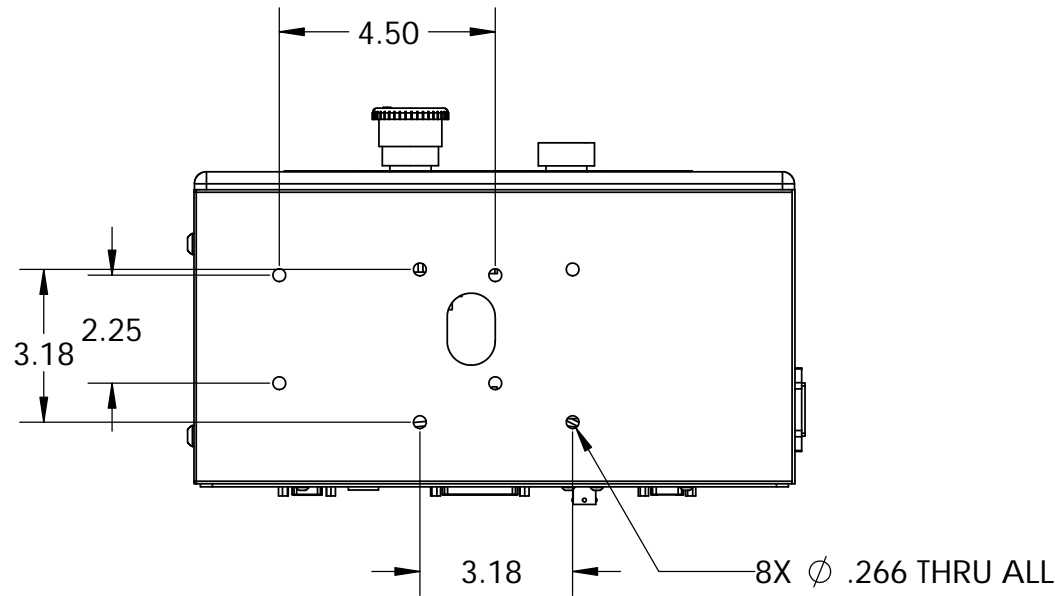
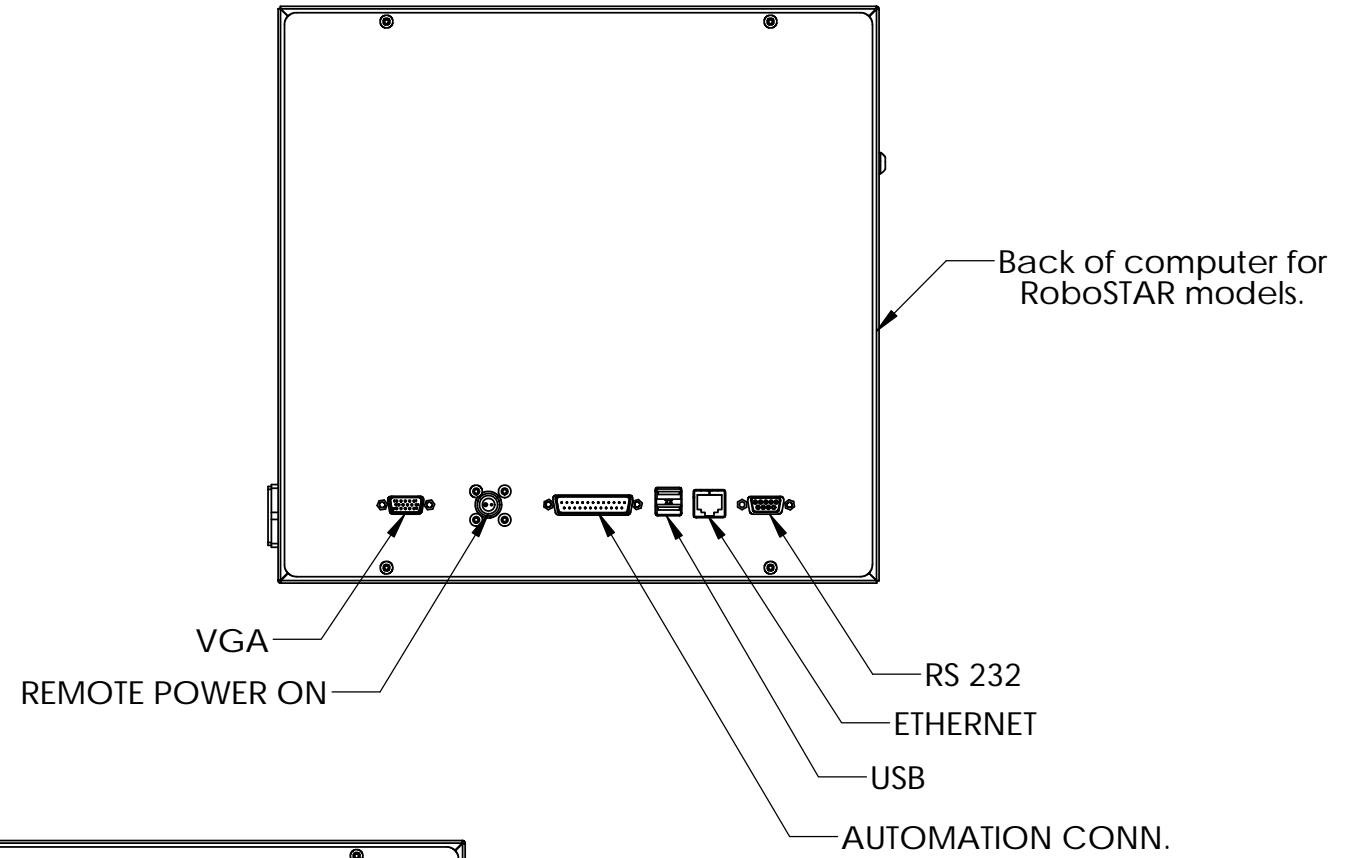
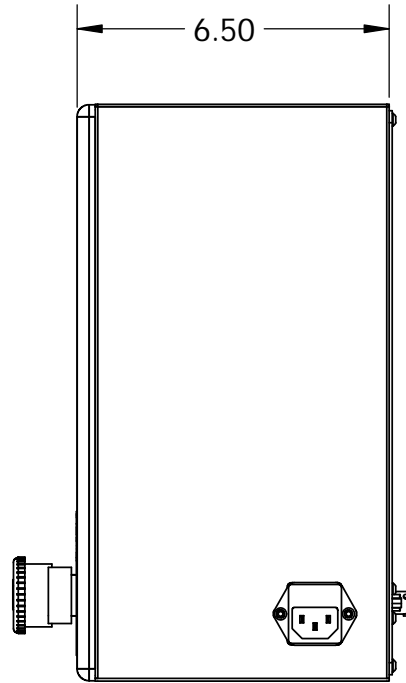
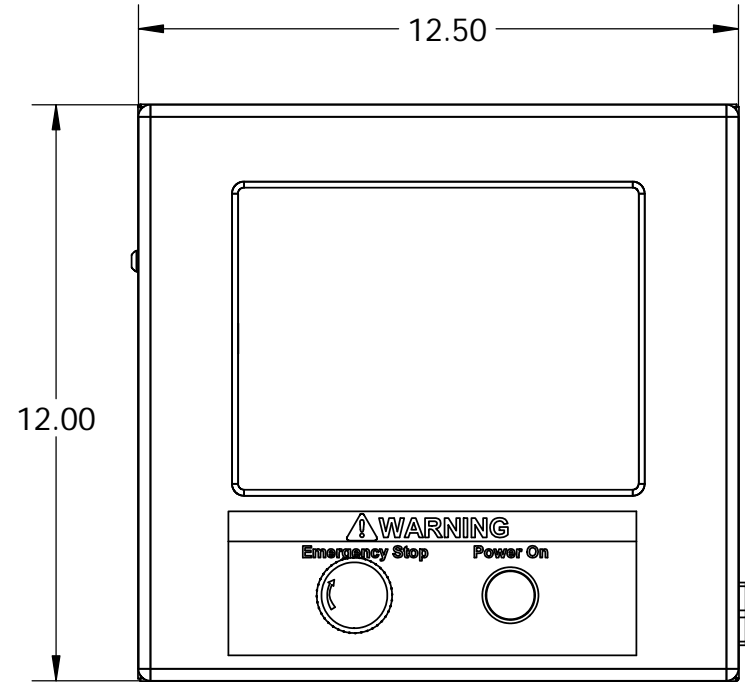
Approved by:


Date:

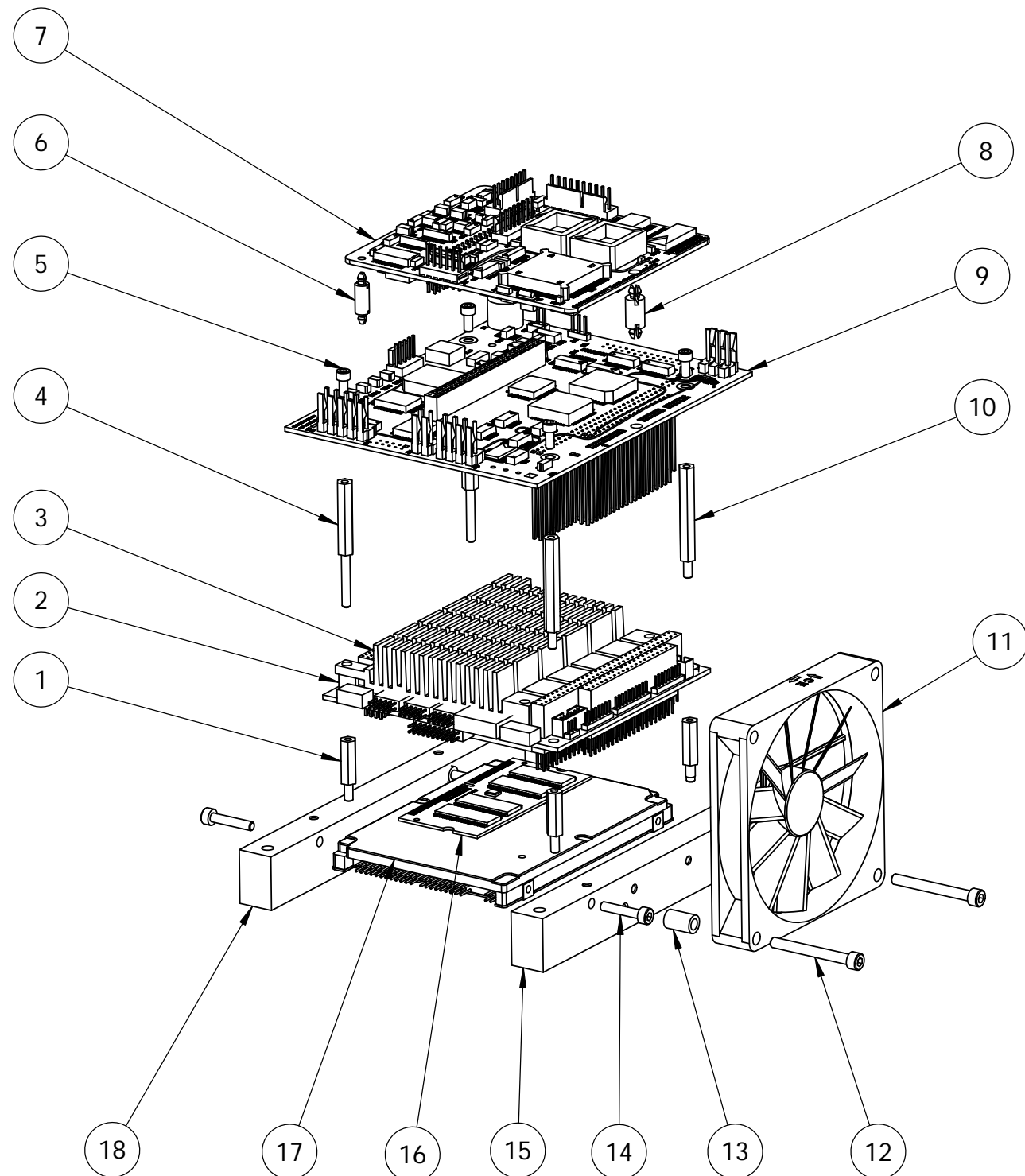
May 29, 2007

SEE ATTACHED 4 DRAWINGS

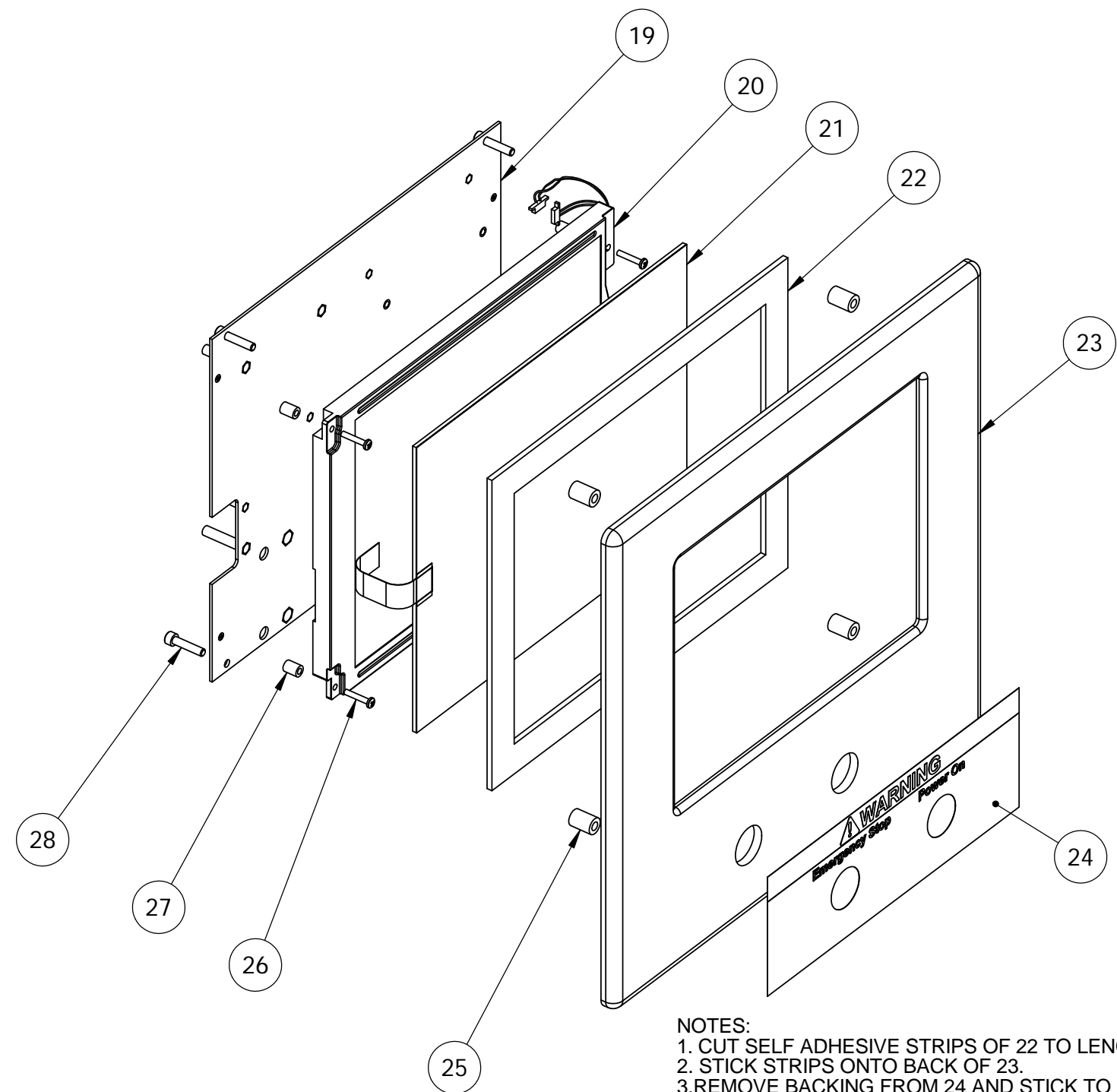
REV	DATE	DESCRIPTION	DRW	APP
		SEE SHEET 4		



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX ± .01 .XXX ± .005	 LARSON SYSTEMS INC. 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182				
			MATERIAL	See Parts List	
FINISH	-	APPROVALS	DATE	FLASH COMPUTER ASSEMBLY	
HEAT TREAT	-	DRAWN	KMP		7-6-06
		APP.		B	DWG. NO. 025-0000-0431-10C
		APP.		SCALE: NONE	SHEET 1 OF 5



- NOTES:
1. NOTE ORIENTATION OF ITEMS 14, 15, & 18
 2. INSTALL ITEM 16 TO ITEM 3 BEFORE ATTACHING TO ITEM 1
 3. NOTE ORIENTATION OF ITEM 3
 4. PLUG IN CABLES TO ITEM 3 (PC 104 MODULE) PER SCHEMATIC 025-2000-0165-XX
 5. NOTE ORIENTATION OF ITEMS 7 & 9
 6. INSTALL ITEMS 6, 7, 8, & 9 BEFORE ATTACHING TO ITEM 3
 7. NOTE ORIENTATION OF ARROW ON ITEM 11 TO BE POINTING TOWARD ASSEMBLY BEFORE MOUNTING TO ITEM 15.

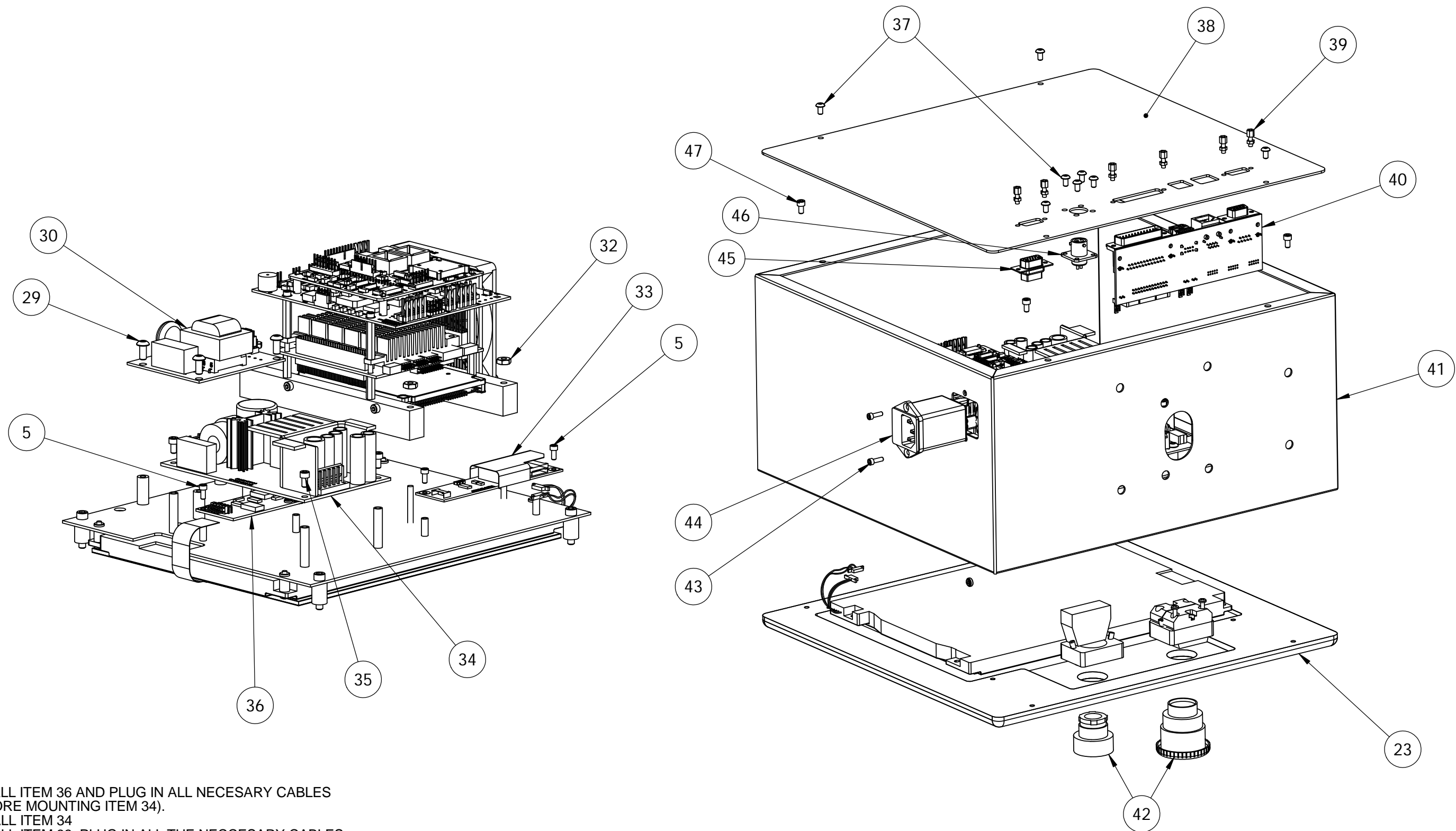


- NOTES:
1. CUT SELF ADHESIVE STRIPS OF 22 TO LENGTH.
 2. STICK STRIPS ONTO BACK OF 23.
 3. REMOVE BACKING FROM 24 AND STICK TO FRONT OF 23.
 4. NOTE ORIENTATION OF ITEMS 19 & 20
 5. INSTALL ITEM 19 TO 20 USING ITEM 26 (4X) & ITEM 27 (4X) BEFORE ATTACHING TO ITEM 23.
 6. NOTE ORIENTATION OF ITEMS 21 & 23
 7. ALIGN ITEM 21 & 23 SO THAT THE ACTIVE AREA OF TOUCHSCREEN IS CENTERED ON THE OPEN AREA OF ITEM 23 (FRONT BEZEL). PEEL & PREPARE FRONT AND BACK ADHESIVE OF TOUCHSCREEN AND PLACE IT.
 8. INSTALL ITEM 19 TO ITEM 23 USING ITEM 25 AND ITEM 28.



LARSON SYSTEMS INC.

10073 Baltimore St. NE PH. 763-780-2131
 Mpls., MN 55449 FAX. 763-780-2182



NOTES:

1. INSTALL ITEM 36 AND PLUG IN ALL NECESSARY CABLES (BEFORE MOUNTING ITEM 34).
2. INSTALL ITEM 34
3. INSTALL ITEM 33. PLUG IN ALL THE NECESSARY CABLES
4. PLUG IN ALL CABLES TO ITEM 31 (EXTERNAL CONNECTORS ASSEMBLY) AND ALL REMAINING CABLES PER SCHEMATIC 025-2000-0165-XX

5. HAVE ASSEMBLY CHECKED BEFORE NEXT OPERATION.

6. APPLY LOCTITE 242 BLUE TO ITEMS 47 AT THE END OF ASSEMBLY.
7. **FOR 230V MODEL**, BOTH JUMPERS FROM ITEM 30 "AC DISTRIBUTION PC ASSEMBLY" NEED TO BE REMOVED AND ONE JUMPER NEEDS TO BE PLACED ON PINS 2 AND 3

NOTES:

1. INSTALL ITEMS 42 TO ITEM 23
2. INSTALL ITEM 41 TO BACK OF BEZEL USING ITEM 35 (4X) BEFORE ATTACHING ITEMS 39 & 40



025-0000-0431-10 C
FLASH - Computer Assembly

Parts List

Rev	By	Date	Description
	KMP	07-05-2006	
A	DAL	08-03-2007	Added 060-4000-0202-00 factory setup and startup instructions Add Item 21
B	EJS	05-23-2008	REMOVED ITEMS 45, 46. (WAS 25-1-501-02 & 25-1-502-02) REPLACE WITH ITEM 45, THE WHOLE SWITCH ASSEMBLY
C	RRS	03-23-2012	Removed 47, 48 added Robostar config., combined e-stop and on switch into one assembly. renumbered 42 through 47. Removed special notes and added notes concerning location and numbers for the 230V models

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	4	018-0000-2479-00	A	4-40 male - female standoff		in.
2	2	018-0000-3205-00		Spacer For Flash PC104 Module		in.
3	1	016-2000-0012-00	B	PC104 (Pentium) for FLASH Systems		in.
4	2	018-0000-2802-00	A	Standoff Hex, 4-40 X 1.00 M-F		in.
5	8	013-0000-0178-00		4-40 X 1/4 SHCS		in.
6	2	018-0000-2680-00	A	Standoff Double Snap-in (.100 Dia Hole)		in.
7	1	025-1000-0299-01	N	SDHT 3 Analog / Digital PCB Assembly - FLASH		in.
8	1	018-0000-2682-00	C	Standoff Double Snap-in (.152 Dia Hole)		in.
9	1	025-1000-0359-01	F	FLASH PC104 Adapter (Pentium)		in.
10	2	018-0000-2801-00	A	Standoff Hex, 4-40 X 1.353 M-F		in.
11	1	025-1000-0413-01	C	Fan Assembly, FLASH (Pentium)		in.
12	2	013-0000-0470-00		6-32 X 1 1/4 SHCS		in.
13	2	018-0000-2672-00		Spacer, .250 Dia, Flash		in.
14	4	013-0000-0188-00		M3-0.5 X 16 mm SHCS		in.
15	1	018-0000-2478-01	C	FLASH PC 104 Module Mounting Bar, Left		in.
16	1	016-2000-0013-00		1GB Kingston 667 MHz DDR2 SODIMM Memory		in.
17	1	016-2000-0006-00	B	2.5" SATA Notebook Hard Drive		in.
18	1	018-0000-2478-00	C	FLASH PC104 Module Mounting Bar, Right		in.
19	1	018-0000-2411-00	G	LCD Mounting Plate		in.
20	1	014-4000-0006-00		LCD for FLASH Systems		in.
21	1	014-4000-0008-00	B	Touchscreen for FLASH Systems		in.
22	4	010-3000-0035-00		3/4" Vinyl Foam Tape		in.
23	1	018-0000-2862-00	A	Computer Front Bezel, Flash		in.
24	1	017-0000-0029-02	B	Emergency Stop / Power On / Warning Label		in.
25	4	018-0000-2674-00		Spacer BEZEL, Flash		in.
26	4	013-0000-0163-00		4-40 X 5/8 PHMSPH		in.
27	4	018-0000-2475-00		.250 x .334 Display Spacer ID .134, Flash		in.
28	4	013-0000-0156-00		8-32 X 3/4 SHCS		in.
29	4	013-0000-0012-00		8-32 X 3/8 Button Head Cap Screw		in.
30	1	025-1000-0583-00		Flash AC Distribution PCB Assembly		in.

Approved by: 

Date: April 26, 2012

SEE ATTACHED 3 DRAWINGS



025-0000-0431-10 C
FLASH - Computer Assembly

Parts List

Rev	By	Date	Description
	KMP	07-05-2006	
A	DAL	08-03-2007	Added 060-4000-0202-00 factory setup and startup instructions Add Item 21
B	EJS	05-23-2008	REMOVED ITEMS 45, 46. (WAS 25-1-501-02 & 25-1-502-02) REPLACE WITH ITEM 45, THE WHOLE SWITCH ASSEMBLY
C	RRS	03-23-2012	Removed 47, 48 added Robostar config., combined e-stop and on switch into one assembly. renumbered 42 through 47. Removed special notes and added notes concerning location and jumpers for the 230V models

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
32	4	013-0000-0002-00		6-32 Hex Nut		in.
33	1	014-4000-0007-00	A	Backlight Inverter PCB assembly		in.
34	1	011-0000-0022-00	A	5V / 12V DC SUPPLY FOR FLASH		in.
35	4	013-0000-0142-00		6-32 X 1/4 SHCS		in.
36	1	014-4000-0009-00	A	TOUCHSCREEN INTERFACE PCB		in.
37	8	013-0000-0077-00		6-32 X 1/4 BHCS		in.
38	1	018-0000-2864-00	B	Computer Back Cover, FLASH / Star		in.
38	Ref	018-0000-2864-02	B	Computer Back Cover, FLASH / RoboStar, with VGA		in.
39	6	013-1000-0010-00		Female Screw Lock		in.
40	1	025-1000-0393-00	A	FLASH External Connectors Assembly		in.
41	1	018-0000-2863-00		Flash Computer Enclosure		in.
42	1	025-1000-0585-00		Cable, Flash AC Dist pcb to Start/Epo switches		in.
43	2	013-0000-0010-00		4-40 X 3/8 SHCS		in.
44	1	025-1000-0500-00	D	Power Entry 120V Cable, Flash		in.
44	Ref	025-1000-0500-01	D	Power Entry 230V Cable, Flash		in.
45	Ref	025-1000-0641-01		VGA Cable for FLASH Computers - Extended		in.
46	Ref	025-1000-0585-01		Cable, Flash AC Dist pcb to Start/Epo switches &		in.
47	4	013-0000-0139-00		8-32 X 1/4 SHCS		in.
50	Ref	060-4000-0202-00	E	Procedure : FLASH Tester Computer Assembly		in.
51	1	016-2000-0014-00	A	Windows 7 Pro OEM Install DVD		in.

Approved by: 

Date: April 26, 2012

SEE ATTACHED 3 DRAWINGS



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