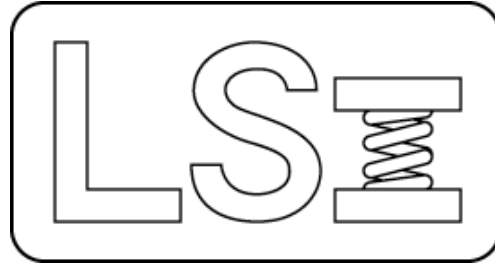


# *Larson Systems Inc.*



## *ASSP with SFM's & 3 Way Sorter*

*050-0000-0061-12*

*Automatic Spring Sorting Package*

*With Presetter, Super Force Meters & Three Way Sorter*





# 050-0000-0061-12 A

# Parts List

## ASSP with SFM's and Three Way Sorter

Rev	By	Date	Description
	RRS	10-16-2013	
A	RRS	01-08-2014	Add items 16 & 17, renumbered Item #8 qty is 14 was 10, Add page 3 & 4

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	Ref	025-0000-0396-04	C	Load/Presetting Station - 40-100 lb, 5" Stroke, 9" Range		in.
2	16	013-0000-0198-00		1/4-20 X 5/8 SHCS		in.
3	4	013-0000-0260-00		5/16-18 X 2 1/2 SHCS		in.
4	1	025-0000-0399-00	J	Indexer Assembly		in.
5	2	018-0000-3560-00		Standoff, Three way sorter, ASSP		in.
6	1	018-0000-3561-00	A	Table Top, ASSP		in.
7	Ref	025-0000-0342-02	A	Super Force Meter ASSP Left mounting		in.
8	14	013-0000-0105-00		1/4-20 X 1/2 BHSCS		in.
9	Ref	025-0000-0342-08	A	Super Force Meter ASSP Right mounting		in.
10	1	025-1000-0263-00	F	SYSTEM CONTROL BOX - INDEXER		in.
11	1	018-0000-2140-05		COMPUTER/TOUCH PANEL MOUNT WELDMENT,		in.
12	4	013-0000-0055-00		5/16-18 X 3/4 SHCS		in.
13	3	013-3000-0020-00		END CAP 2" SQUARE Inside Dim 1.84		in.
14	1	025-0000-0467-05	A	Pneumatics (120 VAC) Assembly, ARK Tech. 3 way		in.
15	1	025-0000-0755-02		Lower Assembly, ASSP		in.
16	4	013-0000-0174-00		1/4-20 X 2 1/4 SHCS		in.
17	2	018-0000-3729-00		Bracket, Pnuematic Valves ASSP		in.
18	1	025-0000-0935-00		Bin Rack Weldment		in.
19	8	013-0000-0200-00		5/16-18 X 5/8 FHSCS		in.
20	3	025-0000-0936-00		Sorter Bin Assembly		in.
21	4	013-0000-0031-00		1/4-20 X 1/2 SHCS		in.
22	1	013-2000-0428-00		Grommet, .625 ID .125" panel thickness		in.
23	Ref	025-0000-0538-07	D	MC46-3 - 3 Way Air Powered Sorter, ASSP (No		in.
24	Ref	025-0000-0508-01	A	ASSP SFM Load Cell, 11 lb, Ø 3.00" Platform		in.
24	Ref	025-0000-0508-03	A	ASSP SFM Load Cell, 66 lb, Ø 3.00" Platform		in.
25	1	025-0000-0461-02		SPRING SUPPORT TABLE, Ark Tech.		in.
26	Ref	025-0000-0511-21	W	Indexer Plate Assembly, 16 station, ".5 ID MIN x 2.00"		in.
27	Ref	025-0000-0937-00	A	ASSP - Power head with linear scale		in.
28	1	018-0000-2182-00		ASSP COMPUTER TOWER COVER PLATE		in.
29	4	013-0000-0052-00		10-32 X 3/8 BHSCS		in.

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

**SEE ATTACHED 4 DRAWINGS**



# 050-0000-0061-12 A

# Parts List

## ASSP with SFM's and Three Way Sorter

Rev	By	Date	Description
	RRS	10-16-2013	
A	RRS	01-08-2014	Add items 16 & 17, renumbered Item #8 qty is 14 was 10, Add page 3 & 4

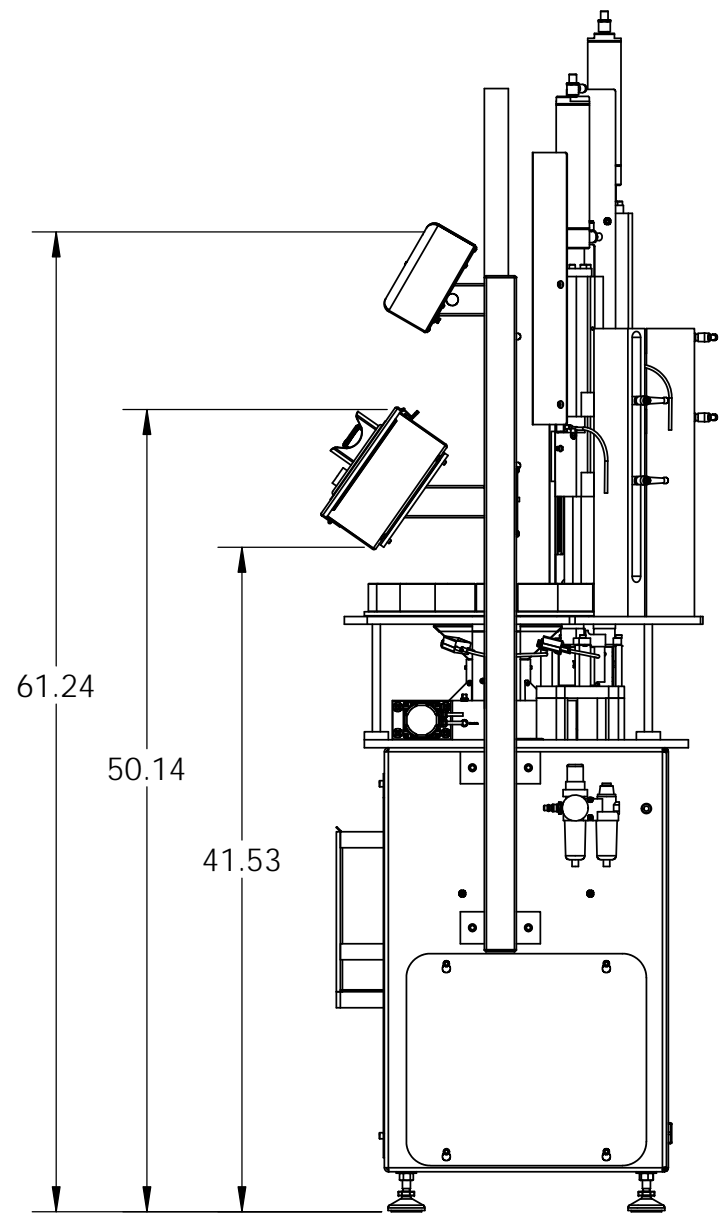
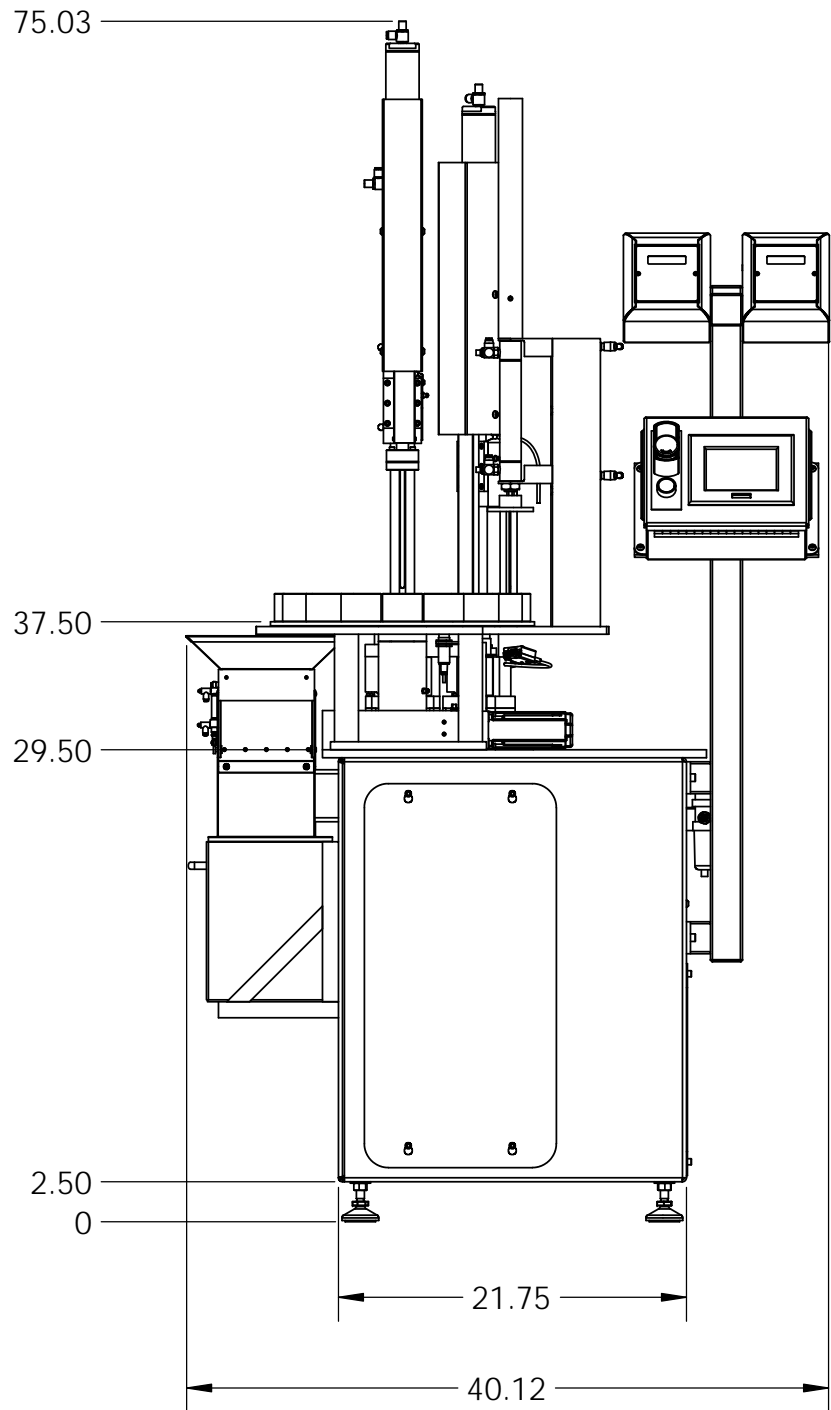
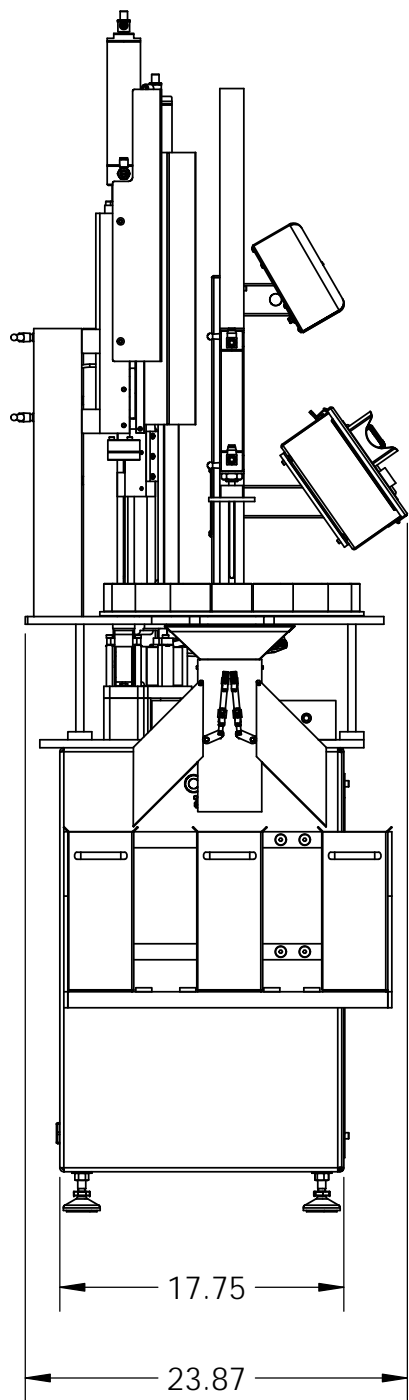
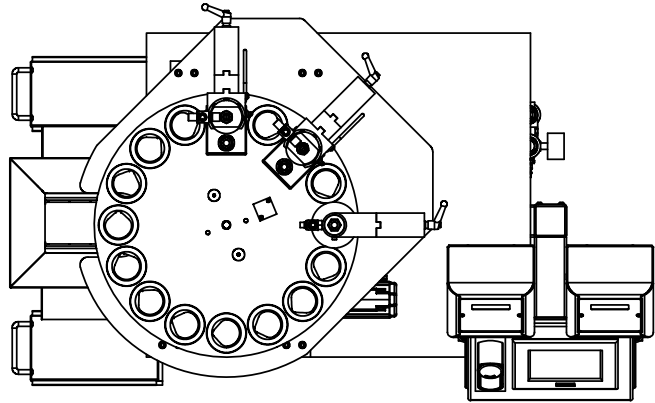
Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
30	1	025-0000-0316-05	A	Power Control Box Assem, ARK TECH, w/ 3 way sorter		in.
31	2	013-0000-0306-00		8-32 X 1 3/4 SHCS		in.
32	1	019-0000-0003-00		Filter, Regulator, Lubricater		in.
33	1	019-0000-0187-00		1/4" NPTF, 1/4" MALE QUICK DISCONNECT		in.
34	1	013-2000-0427-00		Grommet, .3125 ID .125" panel thickness		in.
35	8	013-0000-0580-00		3/18-16 X 1/2" SHCS		in.
36	8	013-2000-0100-00		3/8" FLAT WASHERS		in.
37	1	013-0000-0581-00		Flexible Desk Grommet		in.
38	1	025-6000-0031-01		Sticker Assembly - ASSP with SFM and 3 Way Sorter		in.
39	Ref	025-2000-0163-02	A	Schematic ASSP, Ark Tech. Three place sorter		in.

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

**SEE ATTACHED 4 DRAWINGS**

REV	DATE	DESCRIPTION	DRW	APP

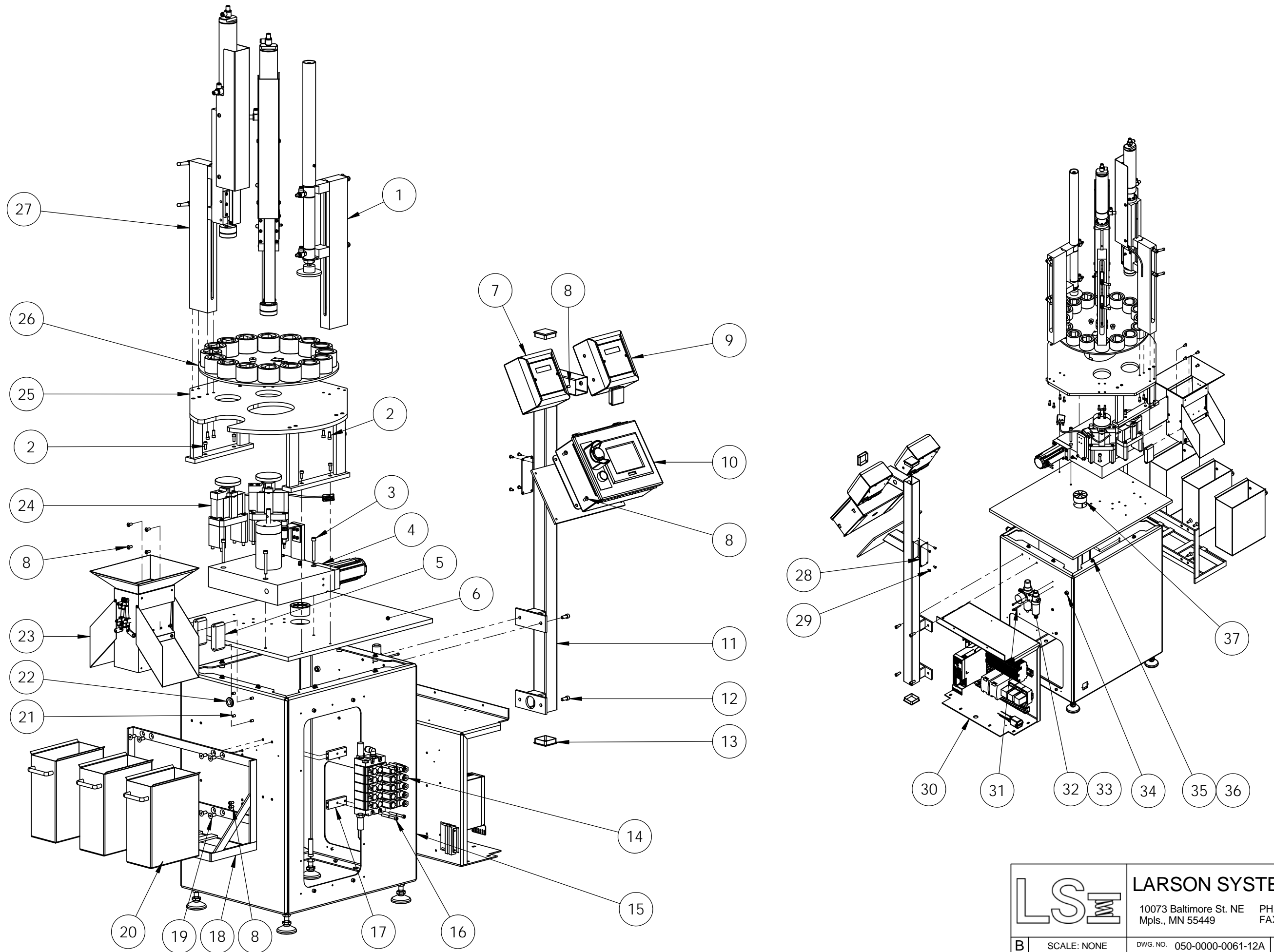


**LARSON SYSTEMS INC.**

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

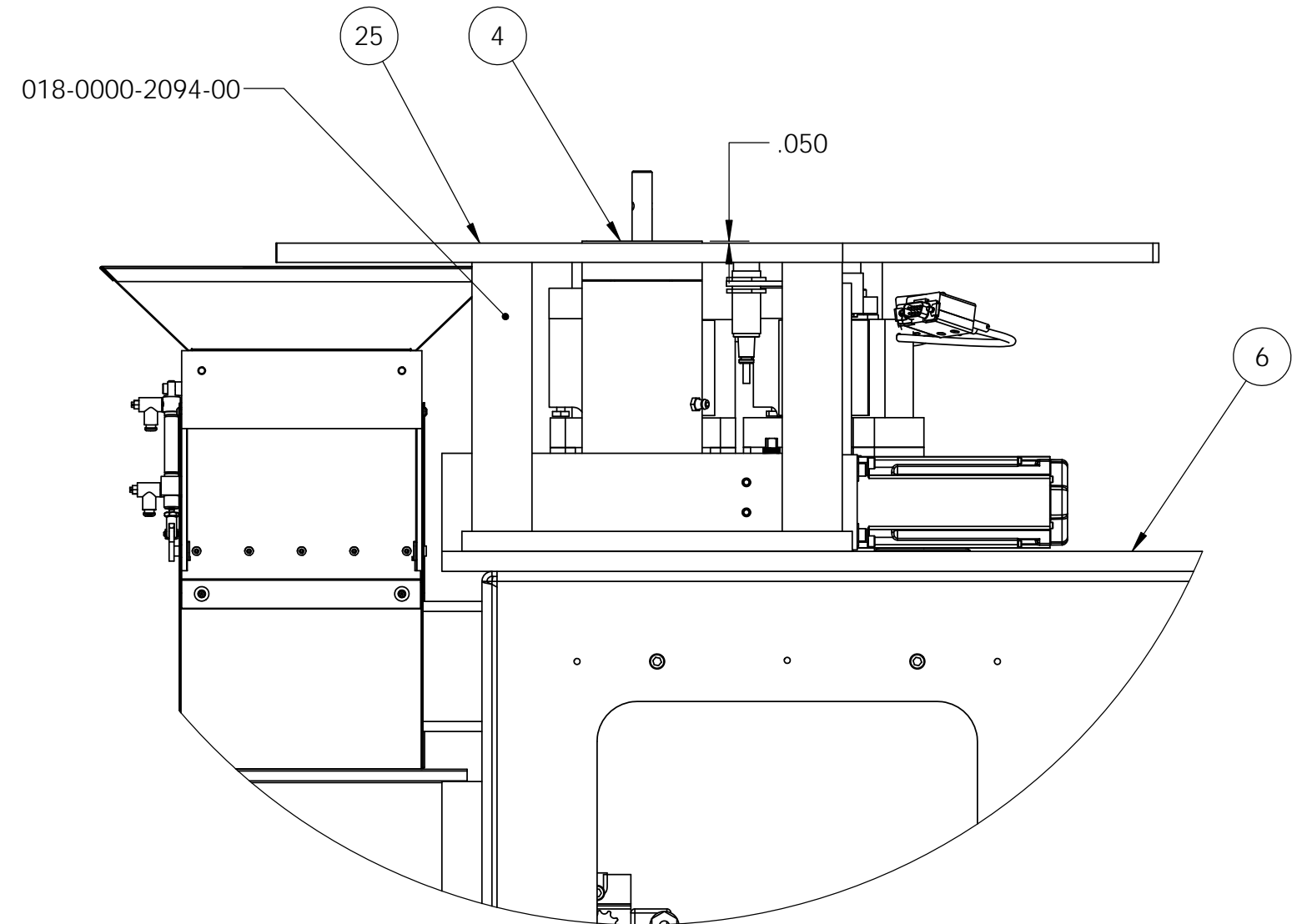
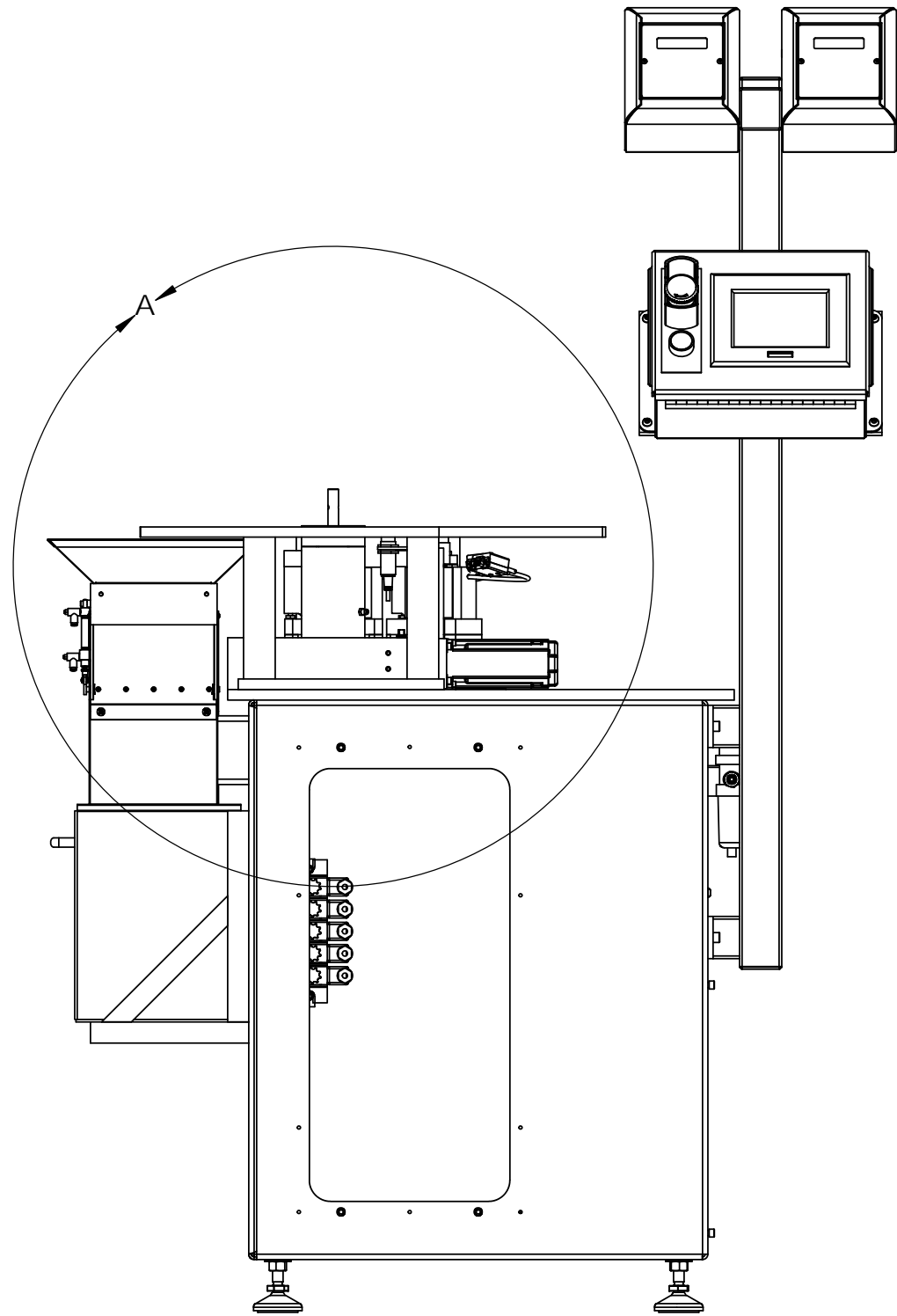
APPROVALS	DATE
DRAWN RRS	10/11/13
APP.	
APP.	

<i>ASSP with Three position Sorter</i>	
B	DWG. NO. 050-0000-0061-12A
SCALE: NONE	REV: SHEET 1 OF 6



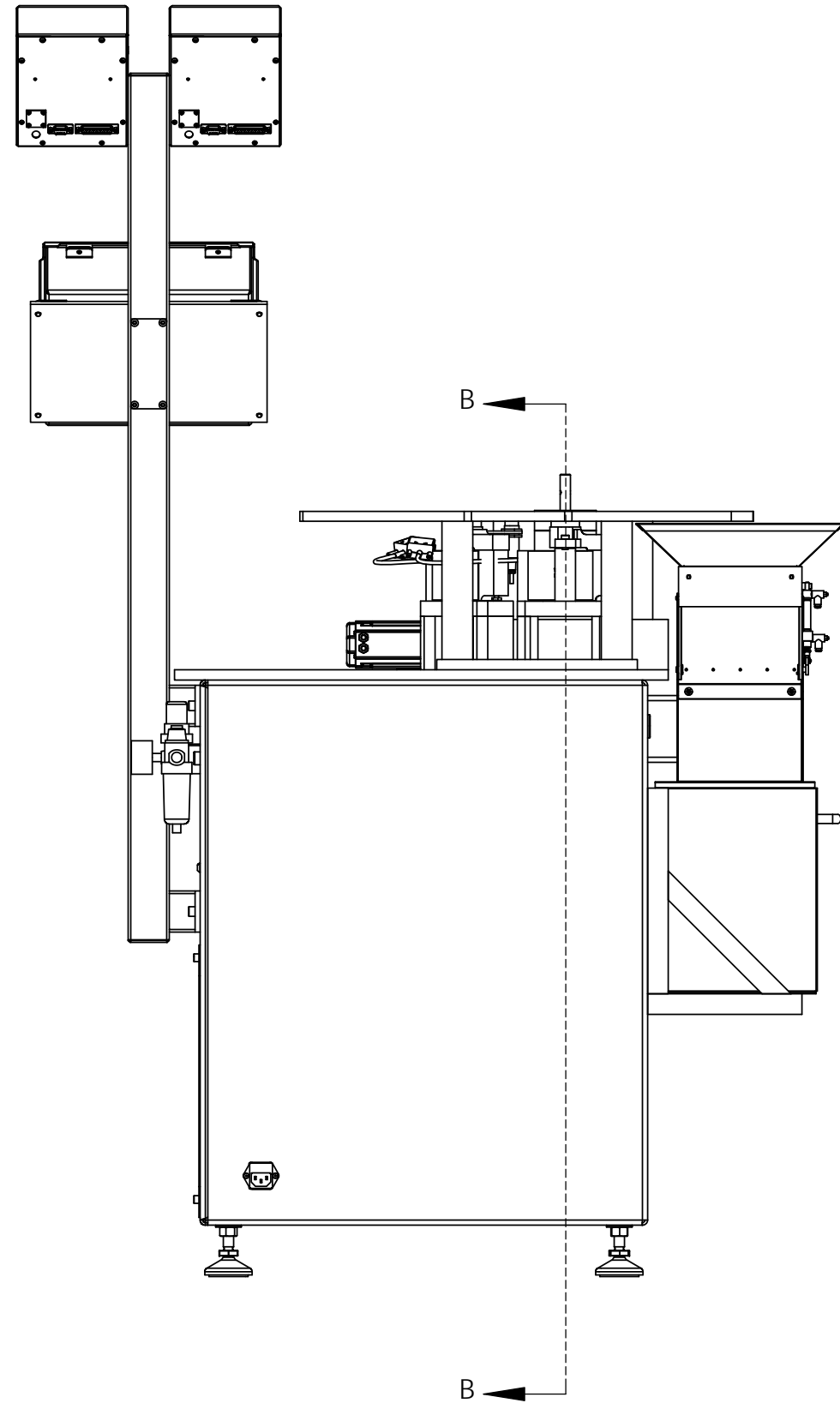
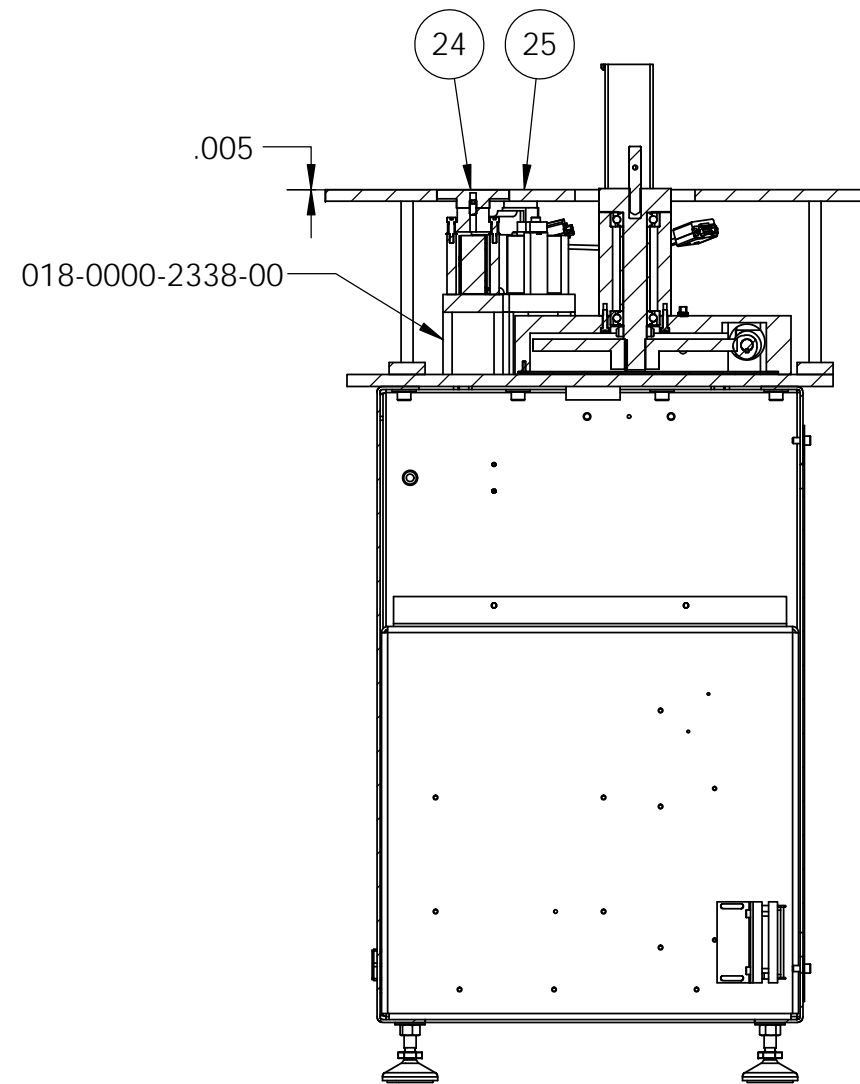
ASSEMBLY NOTES:

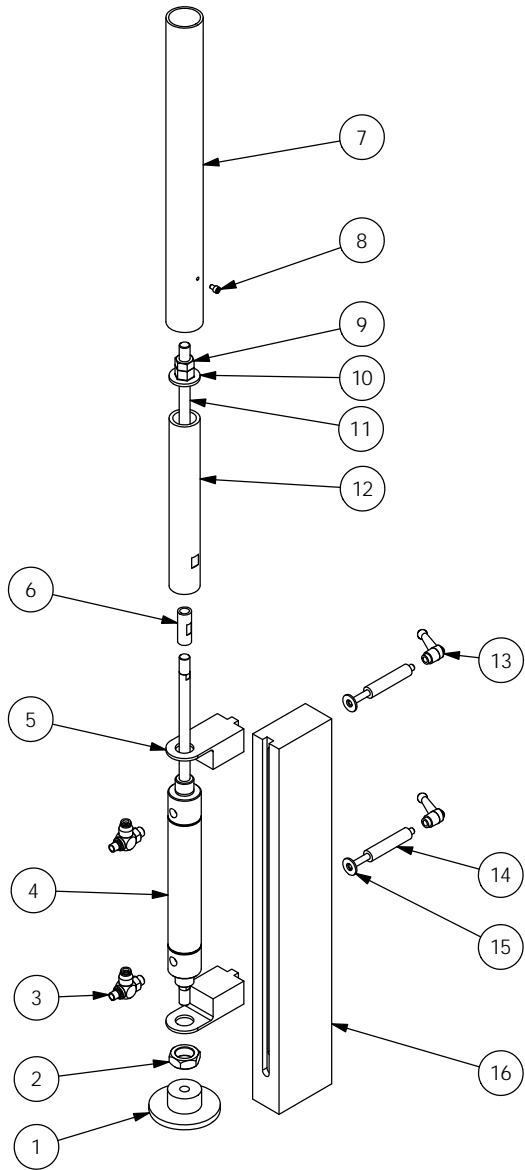
1. Locate item 4 (Indexer Assembly) onto item 6 (Table Top).
2. Install item 25 (Spring Support Table).
3. Top surface of item 25 is to be set below the top surface of item 4 with a .050 clearance.
4. Shorten legs of item 25 (018-0000-2094-00) to create this clearance.



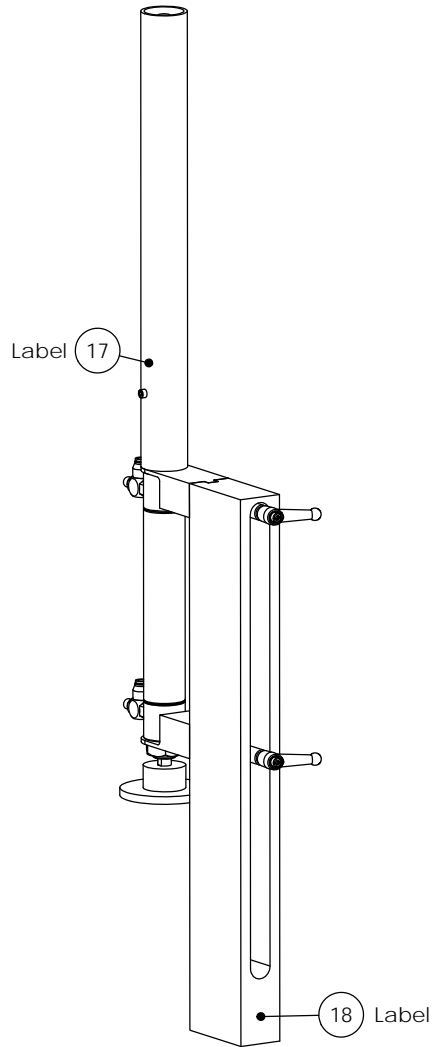
LOAD CELL ASSEMBLY NOTES:

1. Set item 25 to the proper height (Page 3).
2. Platform of item 24 (Load Cell) is to be set .005 clearance below the top surface of item 25 (Spring Support Table).
3. Shorten the standoffs in item 24 (018-0000-2338-00) to create this clearance.

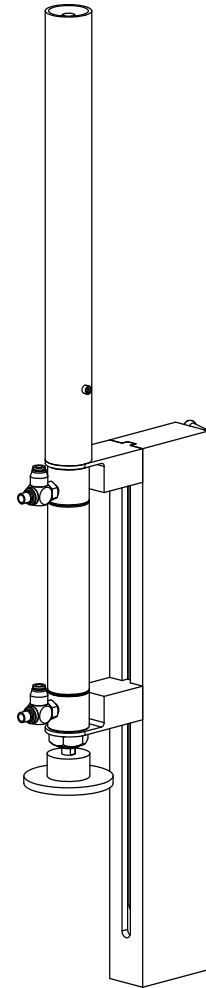




Note: Item 2 is included with item 4.



REV.	DATE	DESCRIPTION	DRW	APPROVED



		<b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182	
		Load Station, 5" Stroke	
APPROVALS DRAWN SMH APPR.	DATE 4/13/02	DWG. NO. B 025-0000-396-04C	SCALE: NONE
SHEET 1 OF 2			SHEET 1 OF 2





025-0000-0396-04 C

# Parts List

Load/Presetting Station - 40-100 lb, 5" Stroke, 9" Range

Rev	By	Date	Description
	DAL	10-13-2003	
A	SMH	05-23-2002	013-0000-0139-00 was 013-0000-0187-00
B	SGS	07-11-2008	ADD ITEM #15-16
C	DAL	10-29-2013	Add item 2 & 3, Revised Balloon Numbers

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	018-0000-2332-00	B	Load Station Platform		in.
2	1	019-0000-0166-00		3/4-16 UNF-2B Nut (Bimba D3556)		in.
3	2	019-0000-0160-00		FLOW CONTROL, 1/8 NPTM x 1/4 Tube		in.
4	1	019-0000-0117-00		Air Cylinder 1.25 dia bore x 5" stroke		in.
5	2	018-0000-1746-01		MOUNT BRACKET, CYLINDER		in.
6	1	018-0000-1749-00		COUPLING NUT 7/16-20 TO 7/16-20		in.
7	1	018-0000-2334-01		Load Station Safety Shield, 5" Stroke, 15"L		in.
8	1	013-0000-0139-00		8-32 X 1/4 SHCS		in.
9	1	013-0000-0288-00		7/16-20 Jam Nut (black finish)		in.
10	1	018-0000-2331-00		Adjustable Stop Nut		in.
11	1	018-0000-1750-01	B	THREADED STOP ROD, 8.375 L		in.
12	1	018-0000-1748-01		Adjustable Stop Block, 8.255 L		in.
13	2	013-5000-0122-00		Adjustable Handle		in.
14	2	018-0000-1978-00		ASSP ADJ. HANDLE STAND OFF		in.
15	2	013-2000-0056-00		1/4" FLAT WASHER - ZINC		in.
16	1	018-0000-1745-01	A	PRESET STATION STAND, 18"L, ASSP mount		in.
17	1	017-0000-0110-01		Instruction Label for Pneumatic Safety Cover Blue		in.
18	1	017-0000-0229-01		ASSP/SFM Load Station Warning Label		in.

Stand base to Cylinder Centerline is Set for Assp (Ref 4.125)

Approved by: 

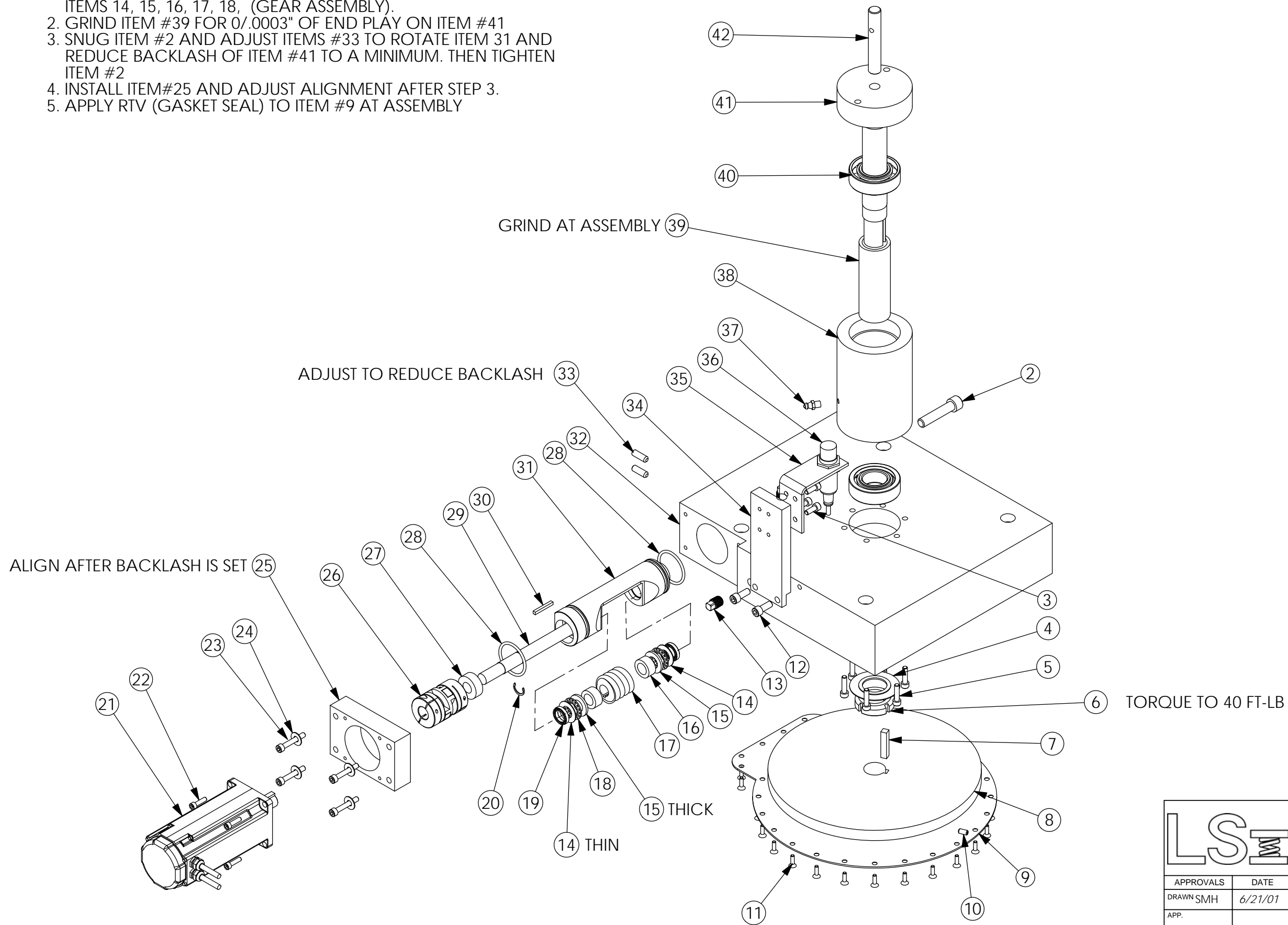
Date: November 1, 2013

**SEE ATTACHED DRAWING**

REV	DATE	DESCRIPTION	DRW	APP

NOTE

1. GRIND ITEM #16 FOR 0/.0003" OF END PLAY ON ITEM #31 AND ITEMS 14, 15, 16, 17, 18, (GEAR ASSEMBLY).
2. GRIND ITEM #39 FOR 0/.0003" OF END PLAY ON ITEM #41
3. SNUG ITEM #2 AND ADJUST ITEMS #33 TO ROTATE ITEM 31 AND REDUCE BACKLASH OF ITEM #41 TO A MINIMUM. THEN TIGHTEN ITEM #2
4. INSTALL ITEM#25 AND ADJUST ALIGNMENT AFTER STEP 3.
5. APPLY RTV (GASKET SEAL) TO ITEM #9 AT ASSEMBLY



		<b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182		
				<i>Indexer Assembly</i>
APPROVALS	DATE	B	DWG. NO. 025-0000-0399-00J	REV:
DRAWN SMH	6/21/01			SCALE: NONE



# 025-0000-0399-00 J

## Indexer Assembly

# Parts List

Rev	By	Date	Description
F	SMH	06-21-2001	Redesigned drive assembly, removed items that are now on 025-0000-0461 assembly, redrawn on solidworks, drawing was 3 sheets
G	KMP	01-28-2008	Fix Assy Drawing
H	DAL	07-30-2008	remove o-rings from #27
J	RRS	10-09-2013	Item 21 is 014-2000-0034-00 was 014-2000-0010-00, item 22 is 013-0000-0161-00 was 013-0000-0135-00, add item 20, item 28 qty is 2 was 1, item 23 was 013-0000-0074-00

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	2	013-2000-0198-00		1/4 DIA. X 1 3/8 DP		in.
2	1	013-0000-0172-00		3/8-16 X 1 3/4 SHCS		in.
3	4	013-0000-0196-00		10-32 X 1/2 SHCS		in.
4	1	018-0000-1388-00		BEARING DUST CAP		in.
5	6	013-0000-0175-00		10-32 X 1 SHCS		in.
6	1	013-2000-0127-00		BH- 05 LOCKING NUT Whittet-Higgins		in.
7	1	018-0000-1804-01	A	1/4 Square Key 1.25 LENGTH		in.
8	1	018-0000-1791-00		Worm Gear Mods		in.
9	1	018-0000-1794-00	A	HOUSING OIL COVER		in.
10	1	013-0000-0127-00		10-32 X 3/8 SSS		in.
11	27	013-0000-0193-00		6-32 X 1/2 FHSCS		in.
12	2	013-0000-0198-00		1/4-20 X 5/8 SHCS		in.
13	2	013-1000-0034-00		1/8 NPT PLUG		in.
14	2	013-2000-0184-00		Thrust Washer, 1/2 x 15/16 x .031 TRA-815		in.
15	2	013-2000-0185-00		Thrust Washer, 1/2 x 15/16 x .092		in.
16	2	018-0000-1711-00	C	Worm Spacer (1300 In-lb)		in.
17	1	013-5000-0118-00		Worm 12dp Single		in.
18	2	013-2000-0183-00		NeedleThrust Bearing		in.
19	2	013-2000-0191-00		Ball Bearing		in.
20	1	013-2000-0426-00		Low Clearance External Retaining Ring		in.
21	1	014-2000-0034-00		AKM23D SERVO Motor		in.
22	4	013-0000-0161-00		8-32 X 5/8 SHCS		in.
23	4	013-0000-0027-00		10-32 X 1 1/4 SHCS		in.
24	4	013-2000-0019-00		#10 Flat WASHER - CUT IRON		in.
25	1	018-0000-2192-00	E	INDEXER MOTOR MOUNTING FLANGE		in.
26	1	013-2000-0197-00	A	Flexible coupling assembly		in.
27	1	013-3000-0015-00		320457 OIL SEAL		in.
28	2	013-3000-0019-00		O-RING 9452K89		in.
29	1	018-0000-2194-00	B	INDEXER WORM SHAFT		in.
30	1	018-0000-1327-03	E	Key 1/8 X 1/8 X 1.00		in.

Uses about 2 quarts of item 45

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

**SEE ATTACHED DRAWING**



025-0000-0399-00 J

Indexer Assembly

# Parts List

Rev	By	Date	Description
F	SMH	06-21-2001	Redesigned drive assembly, removed items that are now on 025-0000-0461 assembly, redrawn on solidworks, drawing was 3 sheets
G	KMP	01-28-2008	Fix Assy Drawing
H	DAL	07-30-2008	remove o-rings from #27
J	RRS	10-09-2013	Item 21 is 014-2000-0034-00 was 014-2000-0010-00, item 22 is 013-0000-0161-00 was 013-0000-0135-00, add item 20, item 28 qty is 2 was 1, item 23 was 013-0000-0074-00

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
31	1	018-0000-2195-00	B	INDEXER WORM HOUSING		in.
32	1	018-0000-1777-00	F	INDEXER WORM HOUSING		in.
33	1	013-0000-0325-00		1/4-28 X 3/4 SSS (FLAT PT)		in.
34	1	018-0000-1797-00	B	SUPPORT POST MODIFIED		in.
35	1	018-0000-1796-00	C	SWITCH MOUNT BRACKET		in.
36	Ref	007-0000-0087-00		Proximity Switch w/Cable		in.
37	1	013-1000-0012-00		1/4-28 Grease Fitting		in.
38	1	018-0000-1783-00	B	INDEXER BEARING HOUSING		in.
39	1	018-0000-1782-00		PRE-LOAD BUSHING		in.
40	2	013-2000-0126-00		Bearing, Fafnir 7205w		in.
41	1	018-0000-1784-00	C	INDEXER SHAFT		in.
42	1	013-1000-0020-00		1/2-13 X 2" THREADED ROD		in.
43	1	013-2000-0194-00		3/16 X 1.00" ROLL PIN		in.
44	1	013-1000-0021-00		Speed Ball Handle 1/2-13		in.
45	ref	806-0000-0006-00		DTE Light 5 gal		in.

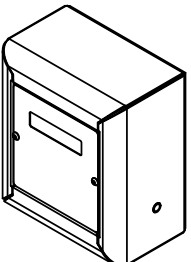
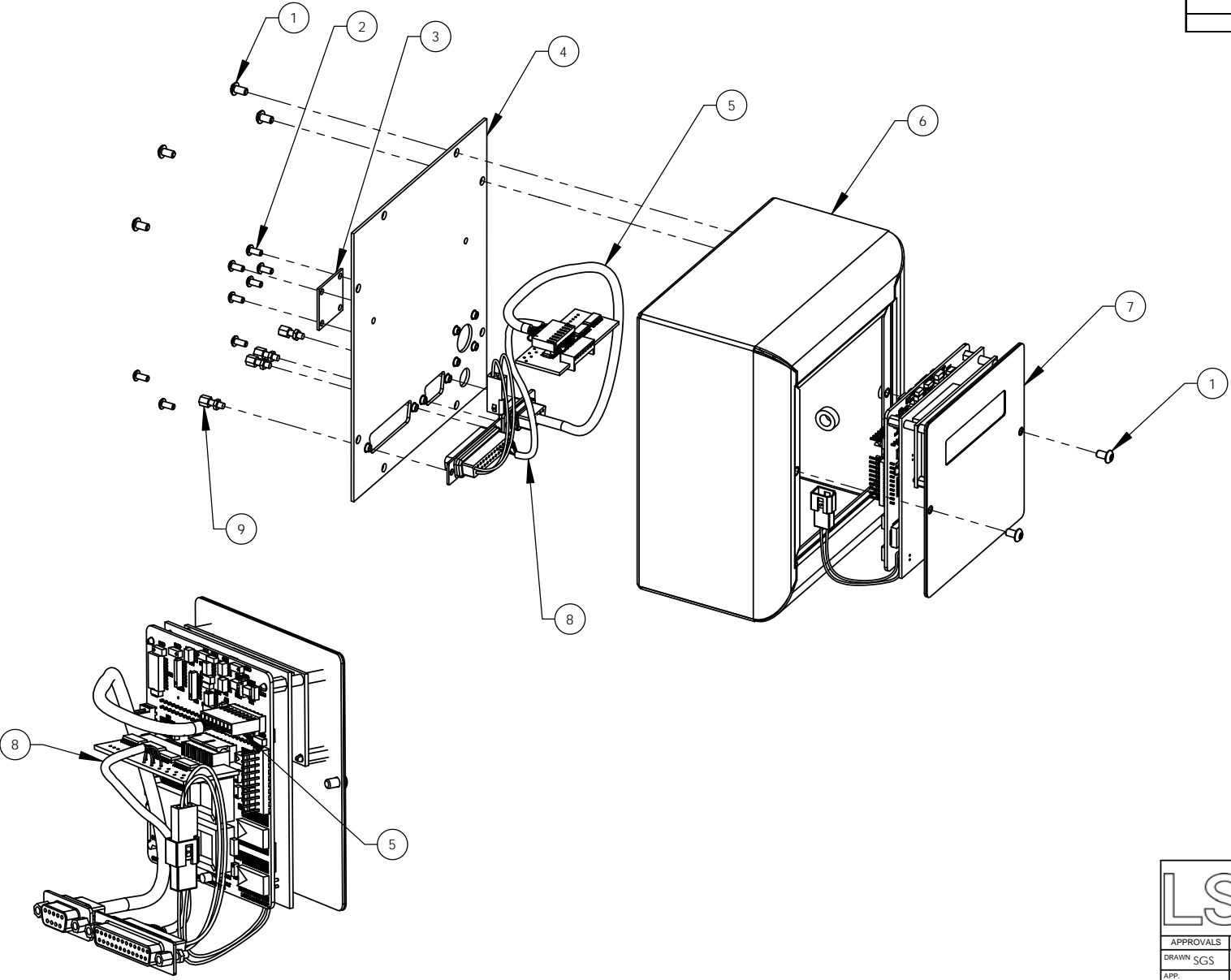
Uses about 2 quarts of item 45

Approved by: \_\_\_\_\_

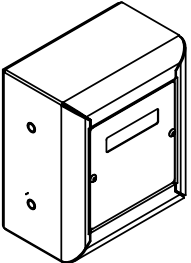
Date: \_\_\_\_\_

**SEE ATTACHED DRAWING**

REV	DATE	DESCRIPTION	DRW	APP



025-0000-0342-02  
LEFT MOUNTING



025-0000-0342-08  
RIGHT MOUNTING



**LARSON SYSTEMS INC.**

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

APPROVALS	DATE
DRAWN SGS	7/8/08
APP:	
APP:	

<i>Super Force Meter ASSP</i>	
<b>B</b>	DWG. NO. 025-0000-0342-02 & -08A
SCALE: NONE	SHEET 1 OF 2



025-0000-0342-02 A

# Parts List

Super Force Meter ASSP Left mounting

Rev	By	Date	Description
	KMP	03-04-2004	
A	RRS	10-15-2013	Item 6 is 018-3000-0018-00 was 018-3000-0007-00, Add items 2, 3 & 4. Add -08

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	10	013-0000-0077-00		6-32 X 1/4 BHCS		in.
2	4	013-0000-0020-00		4-40 X 1/4 BHCS		in.
3	1	018-0000-2644-00		Encoder Cover, FDHT 1500 Force Meter Enclosure		in.
4	1	018-3000-0019-00	B	Cover, Force Meter		in.
5	1	025-1000-0304-02	E	SMART CELL CABLE ASSEMBLY, SDHT		in.
6	1	018-3000-0018-00	A	Enclosure, Force Meter, ASSP, left mount		in.
7	1	025-0000-0284-01	B	Front Panel Assembly - SDHT - ASSP		in.
8	1	025-1000-0616-01		SDHT3 EXPANSION BOARD Assembly - ASSP		in.
9	4	013-1000-0010-00		Female Screw Lock		in.
10	1	017-0000-0066-09		Back Label - SFM on ASSP		in.

Approved by: 

Date: October 16, 2013

**SEE ATTACHED DRAWING**



025-0000-0342-08 A

# Parts List

Super Force Meter ASSP Right mounting

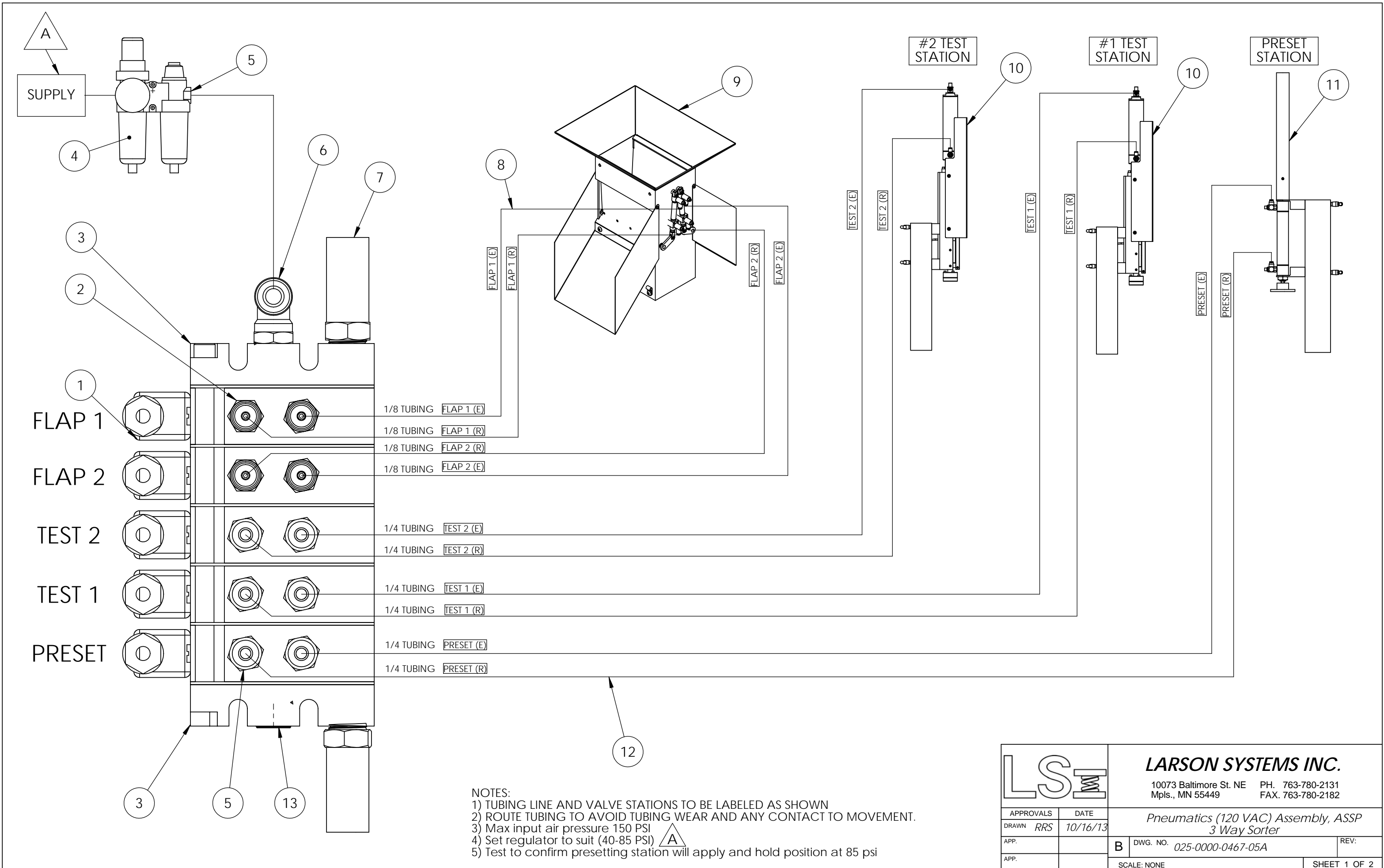
Rev	By	Date	Description
	KMP	03-04-2004	
A	RRS	10-15-2013	Item 6 is 018-3000-0018-00 was 018-3000-0007-00, Add items 2, 3 & 4. Add -08

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	10	013-0000-0077-00		6-32 X 1/4 BHCS		in.
2	4	013-0000-0020-00		4-40 X 1/4 BHCS		in.
3	1	018-0000-2644-00		Encoder Cover, FDHT 1500 Force Meter Enclosure		in.
4	1	018-3000-0019-00	B	Cover, Force Meter		in.
5	1	025-1000-0304-02	E	SMART CELL CABLE ASSEMBLY, SDHT		in.
6	1	018-3000-0018-03	A	Enclosure, Force Meter, ASSP, Right mount		in.
7	1	025-0000-0284-01	B	Front Panel Assembly - SDHT - ASSP		in.
8	1	025-1000-0616-01		SDHT3 EXPANSION BOARD Assembly - ASSP		in.
9	4	013-1000-0010-00		Female Screw Lock		in.
10	1	017-0000-0066-09		Back Label - SFM on ASSP		in.

Approved by: 

Date: October 16, 2013

**SEE ATTACHED DRAWING**



- NOTES:  
 1) TUBING LINE AND VALVE STATIONS TO BE LABELED AS SHOWN  
 2) ROUTE TUBING TO AVOID TUBING WEAR AND ANY CONTACT TO MOVEMENT.  
 3) Max input air pressure 150 PSI  
 4) Set regulator to suit (40-85 PSI) **A**  
 5) Test to confirm presetting station will apply and hold position at 85 psi

		<b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182	
		<i>Pneumatics (120 VAC) Assembly, ASSP          3 Way Sorter</i>	
APPROVALS	DATE	<b>B</b> DWG. NO. 025-0000-0467-05A	REV:
DRAWN RRS	10/16/13		
APP.		SCALE: NONE	SHEET 1 OF 2





025-0000-0467-05 A

# Parts List

Pneumatics (120 VAC) Assembly, 3 way

Rev	By	Date	Description
	RRS	09-27-2013	
A	RRS	12-27-2013	Multiple updates

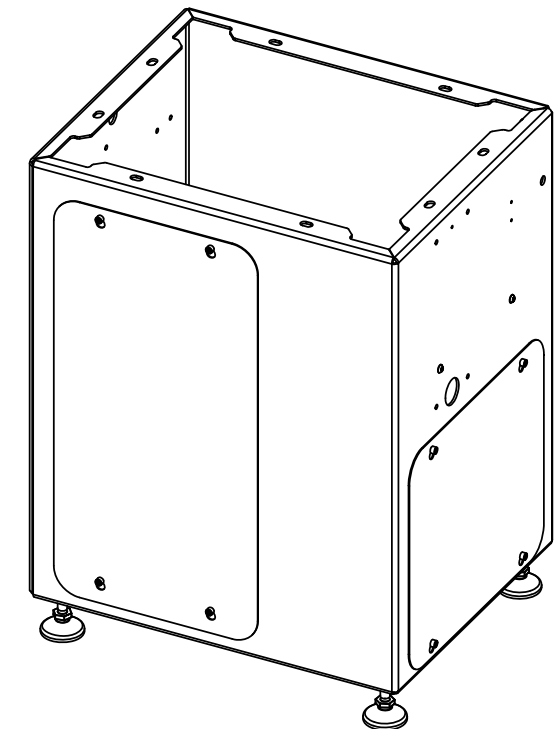
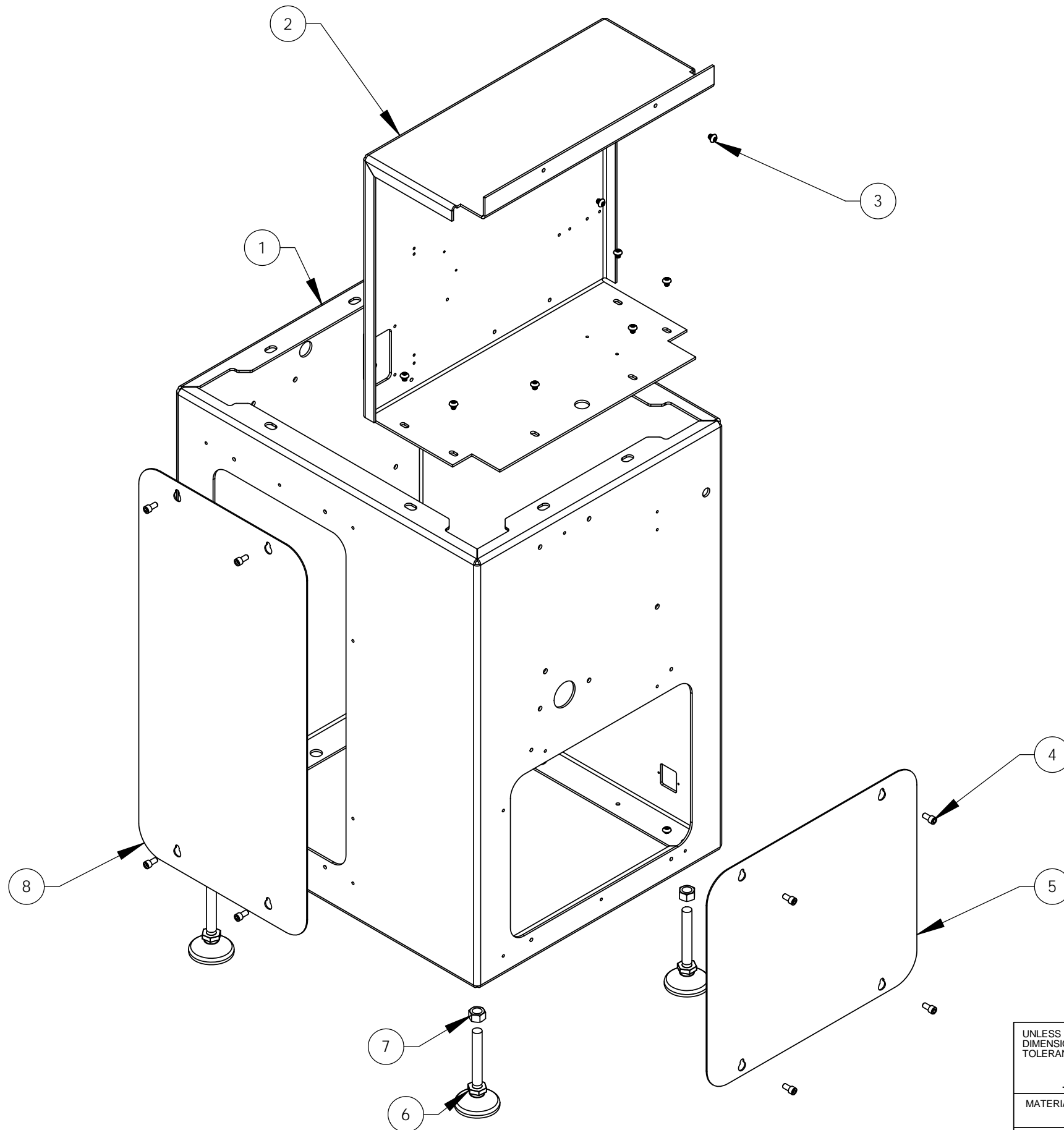
Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	5	019-0000-0206-00		Stackable Solenoid Valve 1/4" ports (120 VAC)		in.
2	4	019-0000-0021-00		1/4" Tube x 1/8 NPTM Connector		in.
3	1	019-0000-0185-00		End Plate Kit		in.
4	Ref	019-0000-0003-00		Filter, Regulator, Lubricater		in.
5	7	019-0000-0188-00		1/4 NPT male to 1/4" tube adapter		in.
6	1	019-0000-0005-00		Fitting: 3/8 NPT X 1/4 TUBE Elbow		in.
7	2	019-0000-0094-00		Pneumatic Vent		in.
8	1	019-0000-0130-00		TUBING 1/8" OD, BLACK		144 in.
9	Ref	025-0000-0538-07	D	MC46-3 - 3 Way Air Powered Sorter, ASSP (No		in.
10	2	025-0000-0937-00	A	ASSP - Power head with linear scale		in.
11	Ref	025-0000-0396-04	C	Load/Presetting Station - 40-100 lb, 5" Stroke, 9" Range		in.
12	1	019-0000-0131-00		TUBING 1/4" OD, BLACK		600 in.
13	2	019-0000-0093-00		3/8 NPT PLUG		in.
14	Ref	013-3000-0034-00		TAPE TEFLON - SEALING		16 in.
15	5	013-3000-0035-00		Cable Clamp, 5/8 Dia.		in.


Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

**SEE ATTACHED DRAWING**

REV	DATE	DESCRIPTION	DRW	APP



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX ± .01 .XXX ± .005				<b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182	
MATERIAL	See Parts List				
FINISH	None	DRAWN RRS	10/10/13	ASSP - Lower Assembly B DWG. NO. 025-0000-0755-02 REV: -	
HEAT TREAT		APP.			



025-0000-0755-02

Lower Assembly, ASSP

# Parts List

Rev	By	Date	Description
	RRS	10-03-2013	

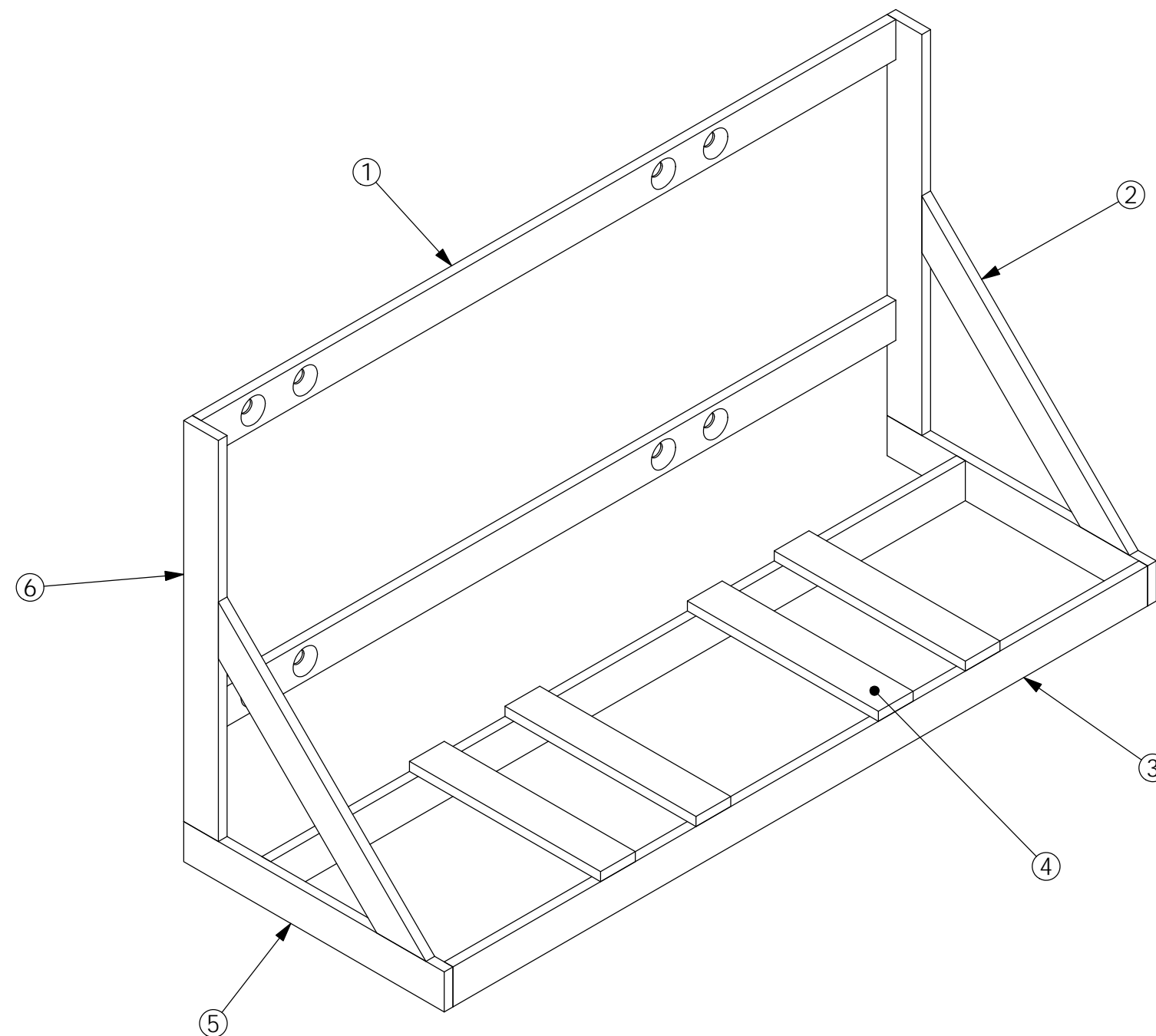
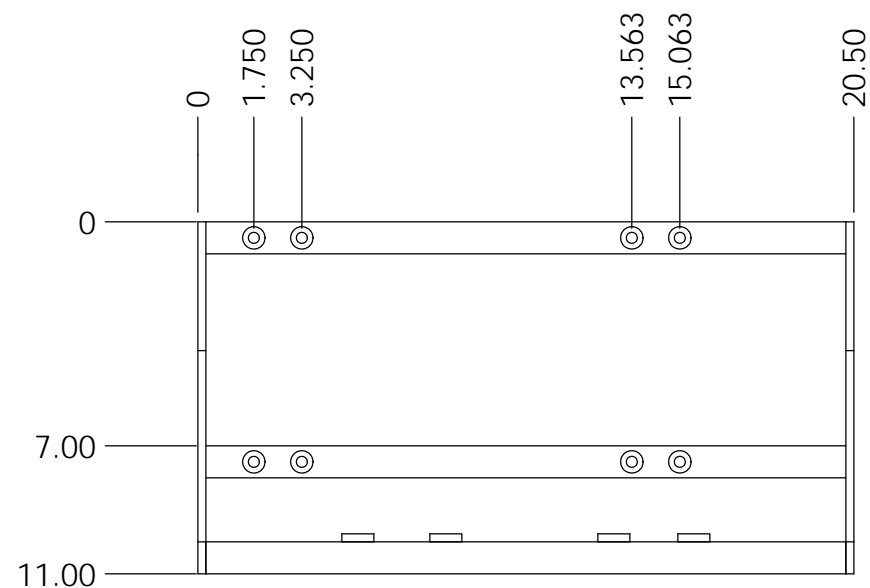
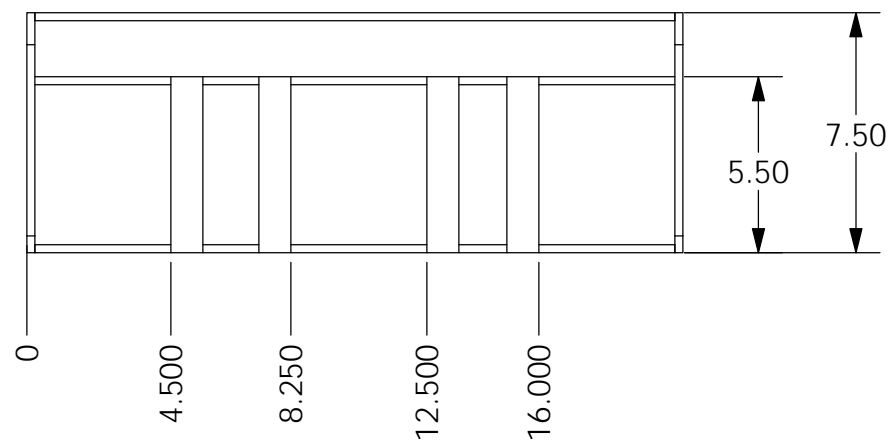
Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	018-0000-3117-02		Base Assembly Stand Weldment, ASSP		in.
2	1	018-0000-3556-00		Enclosure Panel, ASSP		in.
3	8	013-0000-0105-00		1/4-20 X 1/2 BHSCS		in.
4	8	013-0000-0031-00		1/4-20 X 1/2 SHCS		in.
5	1	018-0000-3559-01		Access Panel ASSP		in.
6	4	012-4000-0001-00		LEVELING FEET		in.
7	4	013-0000-0116-00		1/2-13 Hex Nut		in.
8	1	018-0000-3559-00		Access Panel ASSP		in.

Approved by: 


Date: October 16, 2013

**SEE ATTACHED DRAWING**

REV	DATE	DESCRIPTION	DRW	APP



NOTE  
1. GRIND ALL WELDS SMOOTH

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX ± .01 .XXX ± .005			<b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182	
MATERIAL <i>See Parts List</i>	APPROVALS	DATE	B DWG. NO. 025-0000-0935-00	
FINISH <i>Black Paint</i>	DRAWN <i>RRS</i>	10/03/13		
HEAT TREAT	APP.	APP.	SCALE: NONE	
			SHEET 1 OF 2	



025-0000-0935-00

Bin Rack Weldment

# Parts List

Rev	By	Date	Description
	RRS	10-03-2013	

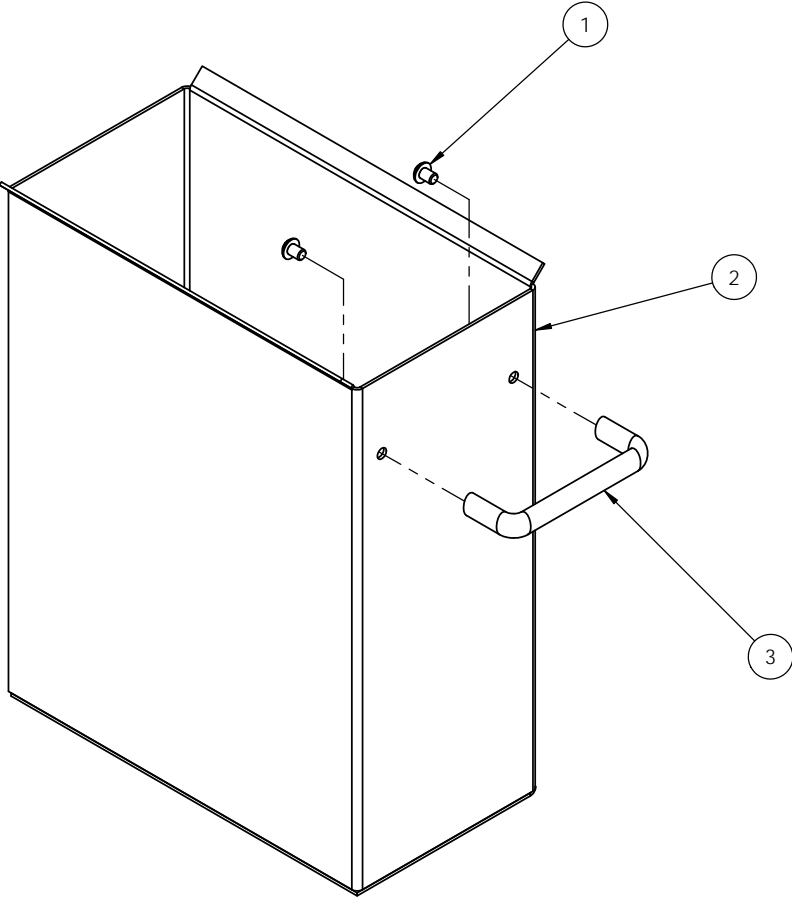
Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	2	018-0000-3557-01		Back Strap, 3 place sorter rack		in.
2	2	018-0000-3557-02		Angled support, 3 place sorter rack		in.
3	2	018-0000-3557-00		Strap, 3 place sorter rack		in.
4	4	018-0000-3557-04		Bottom locating Strap, 3 place sorter rack		in.
5	2	018-0000-3557-03		End Strap, 3 place sorter rack		in.
6	2	018-0000-3557-05		Vertical strap, 3 place sorter rack		in.

Approved by: 

Date: November 1, 2013

**SEE ATTACHED DRAWING**

REV	DATE	DESCRIPTION	DRW	APP



**LARSON SYSTEMS INC.**

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

APPROVALS	DATE
DRAWN RRS	10/10/13
APP:	
APP:	

<i>Sorter Bin</i>	
<b>B</b>	DWG. NO. 025-0000-0936-00
SCALE: NONE	SHEET 1 OF 2

REV:



025-0000-0936-00

Sorter Bin Assembly

# Parts List

Rev	By	Date	Description
	RRS	10-10-2013	

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	2	013-0000-0365-00		10-32 X 1/4 BHSCS, SST		in.
2	1	018-0000-2235-00		SORTER BIN		in.
3	1	013-5000-0138-00		PULL HANDLE, OVAL (SORTER BIN)		in.

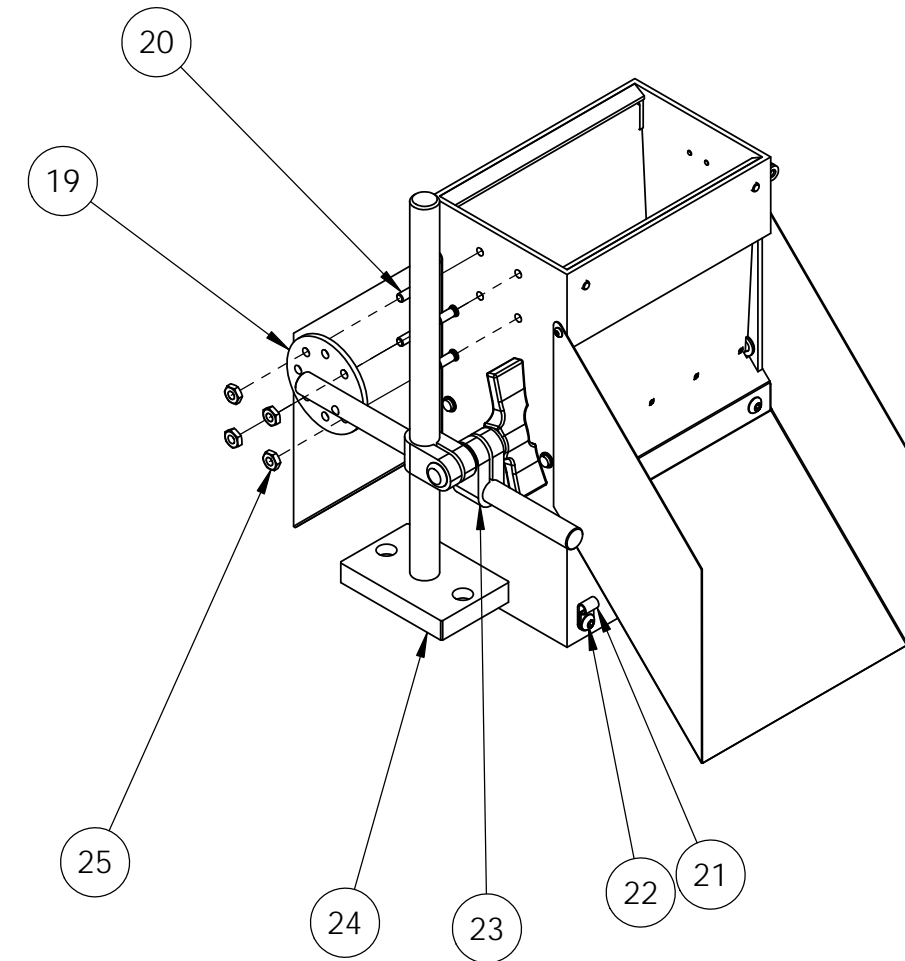
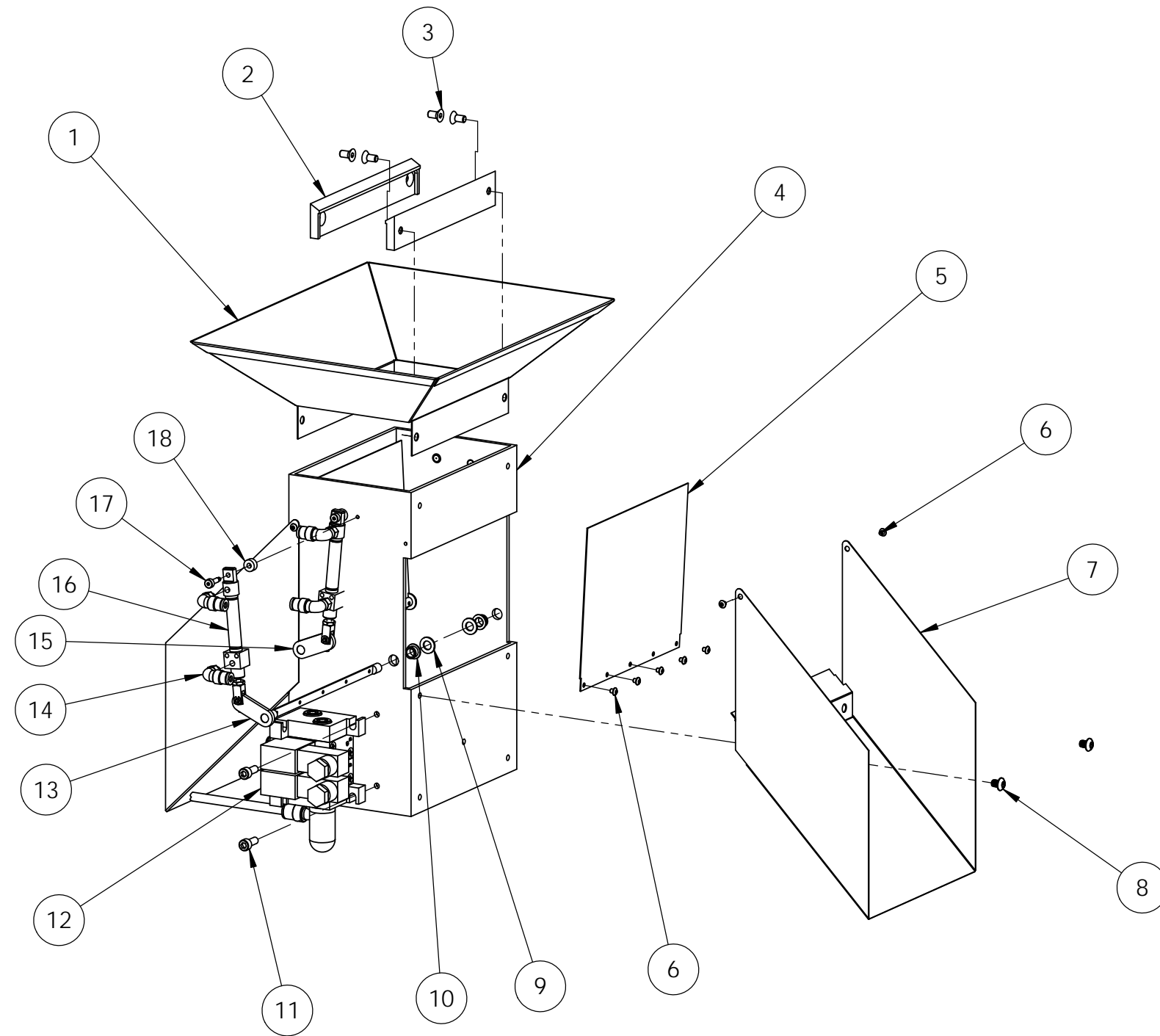
Approved by: 


Date: October 16, 2013

**SEE ATTACHED DRAWING**

-00, -01, -02, -07

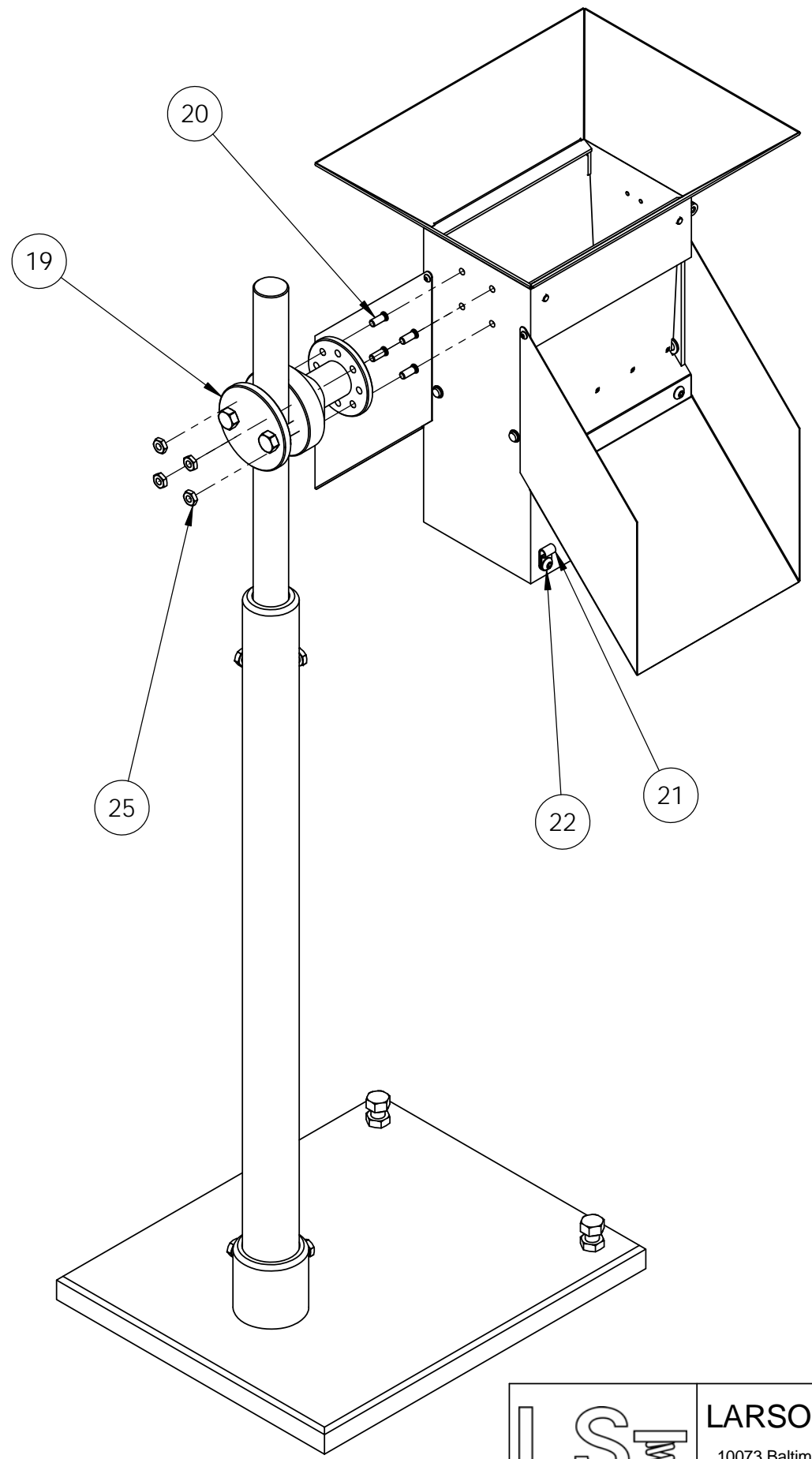
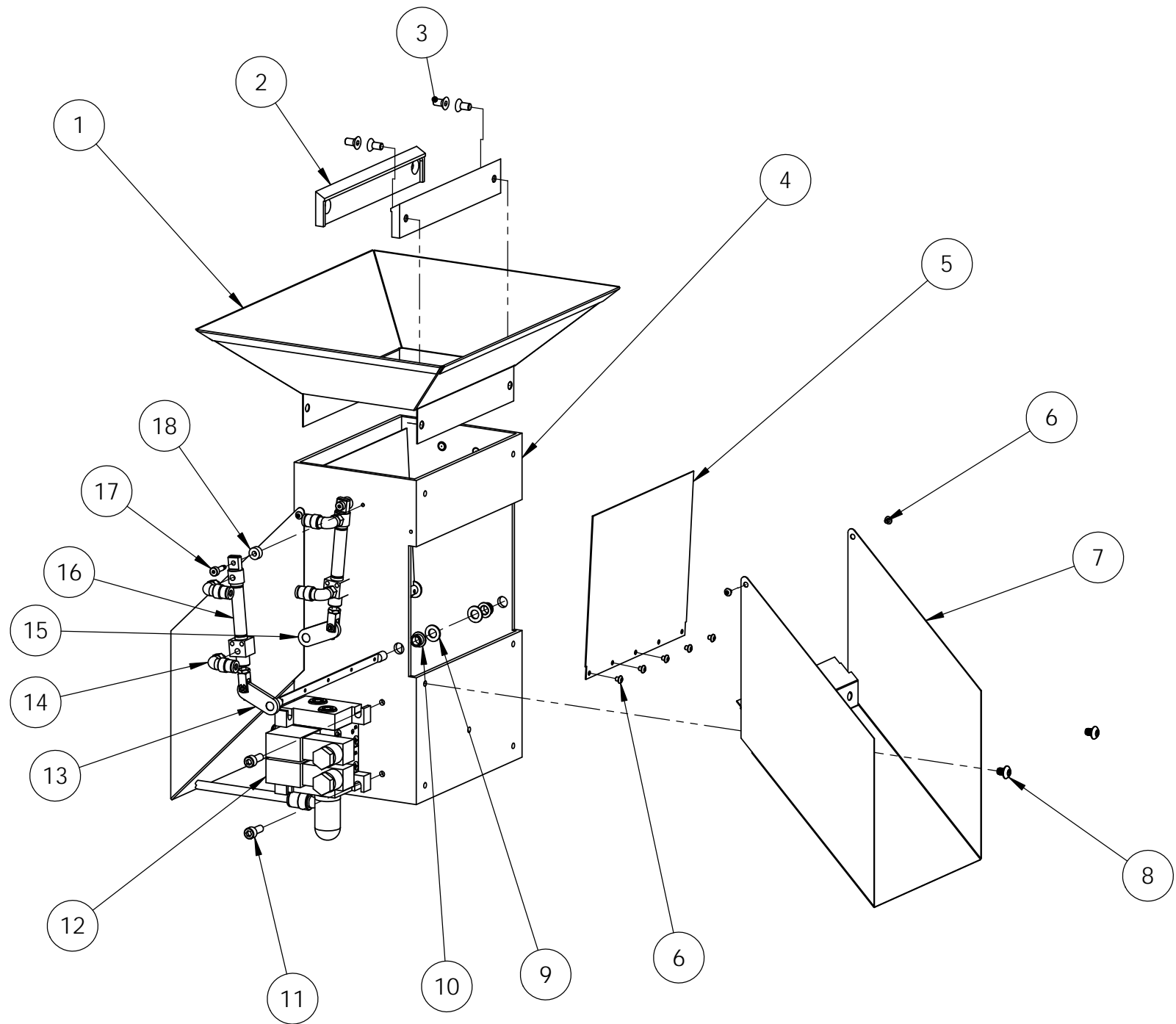
REV	DATE	DESCRIPTION	DRW	APP



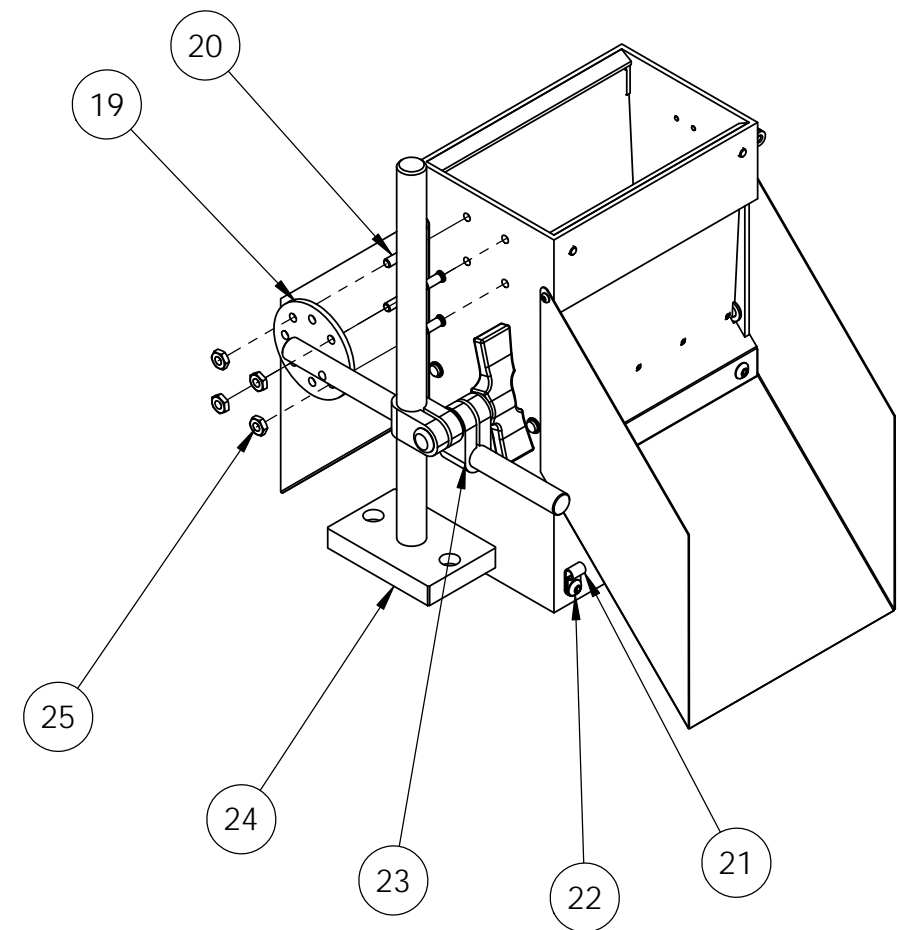
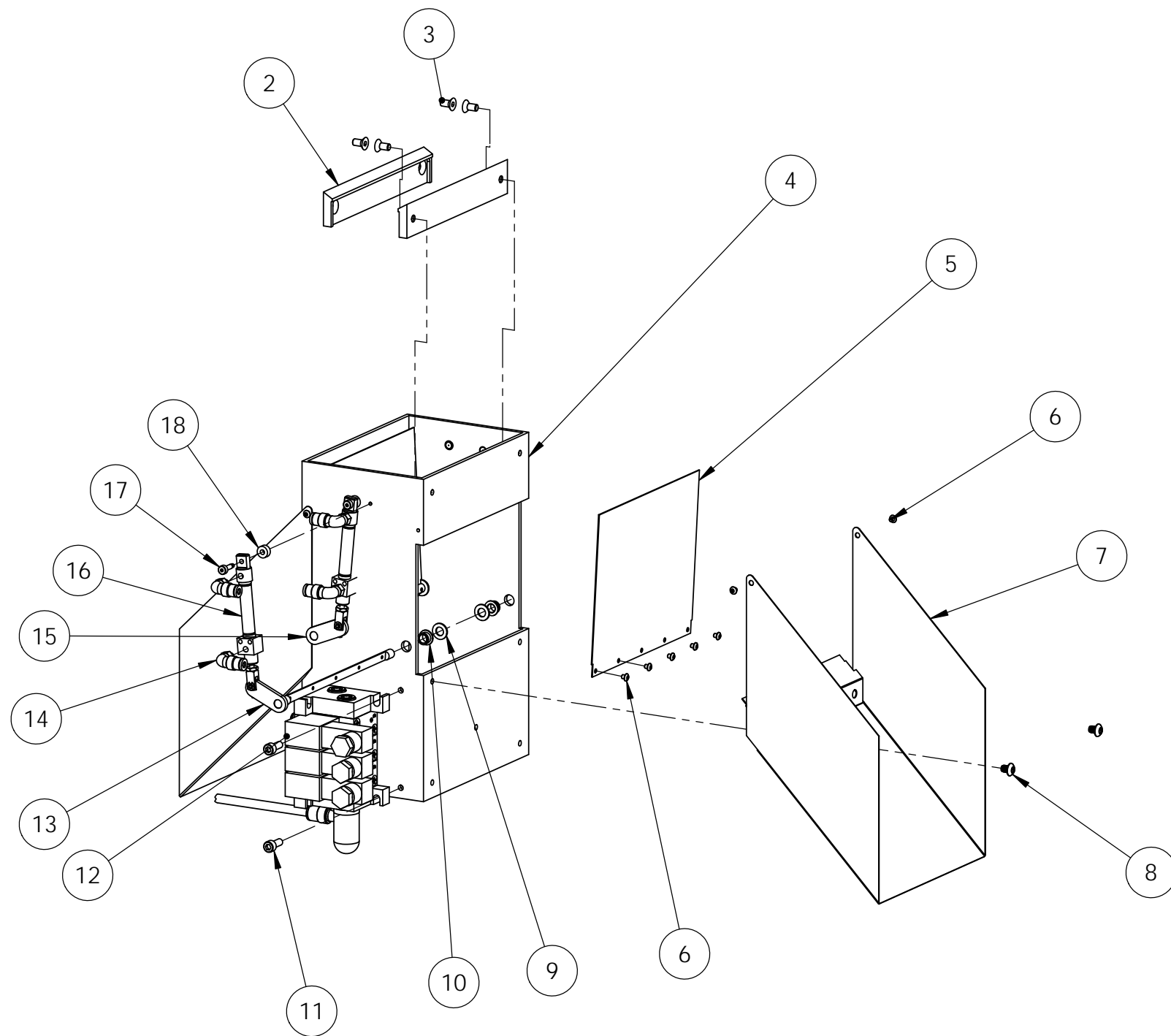
		<b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182	
		MC46-3 3 Way sorter	
APPROVALS	DATE	B DWG. NO. 025-0000-0538-XXD	REV:
DRAWN RRS	03/20/13		
APP.		SCALE: NONE	SHEET 1 OF 5



-03, -04 -05



-06





025-0000-0538-07 D

# Parts List

MC46-3 - 3 Way Air Powered Sorter, ASSP (No

Rev	By	Date	Description
A	DAL	02-18-2004	Revised to manufacture by LSI
B	DAL	05-06-2004	#330 was qty 2 is 1, #360, 361, 362, Corrected tubing lengths, added #460 013-3000-0017-00
C	RRS	03-20-2013	combined 025-0000-0538 & 025-0-0540-00 renumbered
D	RRS	10-11-2013	Add -07

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	018-0000-2502-00		MC46 FUNNEL		in.
2	2	018-0000-2562-00		MC46-3 FLAPPER PAD		in.
3	4	013-0000-0386-00		10-32 X 3/8 FLAT HD SOCKET, BK.OX.		in.
4	1	018-0000-2601-03	B	MC46-3 TUBE WITHOUT PEM STUDS		in.
5	2	018-0000-2499-00		MC46-3 FLAPPER, SOLID		in.
6	14	013-0000-0369-00		4-40 X 1/8 BHSCS Black Oxide		in.
7	2	018-0000-2500-01	A	MC46-3 DEFLECTOR, NON-PERFORATED		in.
8	4	013-0000-0388-00		10-32 X 1/4 BHEAD TORX CAP BLK OX		in.
9	4	013-2000-0275-00		1/4" WASHER .255ID, .468OD MIL SPEC, MC34		in.
10	4	013-2000-0306-00		BEARING, CLIP, IGUS, LUBED PLASTIC		in.
13	1	018-0000-2563-04		MC46-3 ACTUATOR ASSY RT, CYLINDERS ON		in.
14	4	019-0000-0199-00		Flow Control, 10/32 X 1/8 Tube 90°		in.
15	1	018-0000-2563-05		MC46-3 ACTUATOR ASSY LT, CYLINDERS ON		in.
16	2	019-0000-0129-00		AIR CYLINDER, Ø2.0 x 1" STROKE, 5/16 BORE		in.
17	2	013-1000-0036-00		SCREW 4-40, 1/8 SHOULDER, .375, SST		in.
18	2	018-0000-2565-00	A	Spacer 3/8 dia x .14 dia x .160 thick		in.
21	2	013-3000-0035-00		Cable Clamp, 5/8 Dia.		in.
22	2	013-0000-0365-00		10-32 X 1/4 BHSCS, SST		in.
26	1	017-0000-0175-01		Cable Voltage Label - 24 VDC		in.
27	ref	012-2000-0013-00		Loctite 242 (Blue) Medium Strength		in.
28	2	017-0000-0167-00		MC46 3 Way Sorter Label		in.
29	ref	060-4000-0087-00		Assembly Instructions for MC46-3 Mini Chute Final		in.
30	ref	060-4000-0124-00		TEST: MC46-3 MINI SORTING CHUTE, 24VDC		in.
31	1	060-1000-0055-00		User Manual - MC46-3 Way Sorting Chute		in.
32	Ref	025-0000-0467-05		Pneumatics (24 VDC) Assembly, ARK Tech. 3 way		in.

Approved by: \_\_\_\_\_

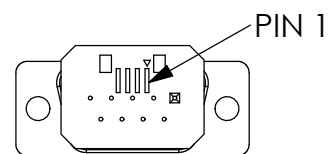
Date: \_\_\_\_\_

**SEE ATTACHED 3 DRAWINGS**

025-0000-508-XX	DESCRIPTION	ITEM 5	ITEM 6	DESCRIPTION
025-0000-508-00	2 lbs	014-0000-028	018-0000-2339	2 lbs, Ø3.00 Platform
025-0000-508-01	11 lbs	014-0000-024	018-0000-2339	11 lbs, Ø3.00 Platform
025-0000-508-02	22 lbs	014-0000-037	018-0000-2339	22 lbs, Ø3.00 Platform
025-0000-508-03	66 lbs	014-0000-025	018-0000-2339	66 lbs, Ø3.00 Platform
025-0000-508-04	110 lbs	014-0000-023	018-0000-2339	110 lbs, Ø3.00 Platform
025-0000-508-05	200 lbs	014-0000-038	018-0000-2339	200 lbs, Ø3.00 Platform
025-0000-508-06	2 lbs	014-0000-028	018-0000-2099	2lbs, Ø1.00 Platform
025-0000-508-07	11 lbs	014-0000-024	018-0000-2099	11 lbs, Ø1.00 Platform
025-0000-508-08	22 lbs	014-0000-037	018-0000-2099	22 lbs, Ø1.00 Platform
025-0000-508-09	66 lbs	014-0000-025	018-0000-2099	66 lbs, Ø1.00 Platform
025-0000-508-10	110 lbs	014-0000-023	018-0000-2099	110 lbs, Ø1.00 Platform
025-0000-508-11	200 lbs	014-0000-038	018-0000-2099	200 lbs, Ø1.00 Platform

REV.	DATE	DESCRIPTION	DRW	APPROVED
A	4/29/02	ADDED -06 THRU -11, ADDED ITEM 6 AND DESCRIPTION TO TABLE	SMH	

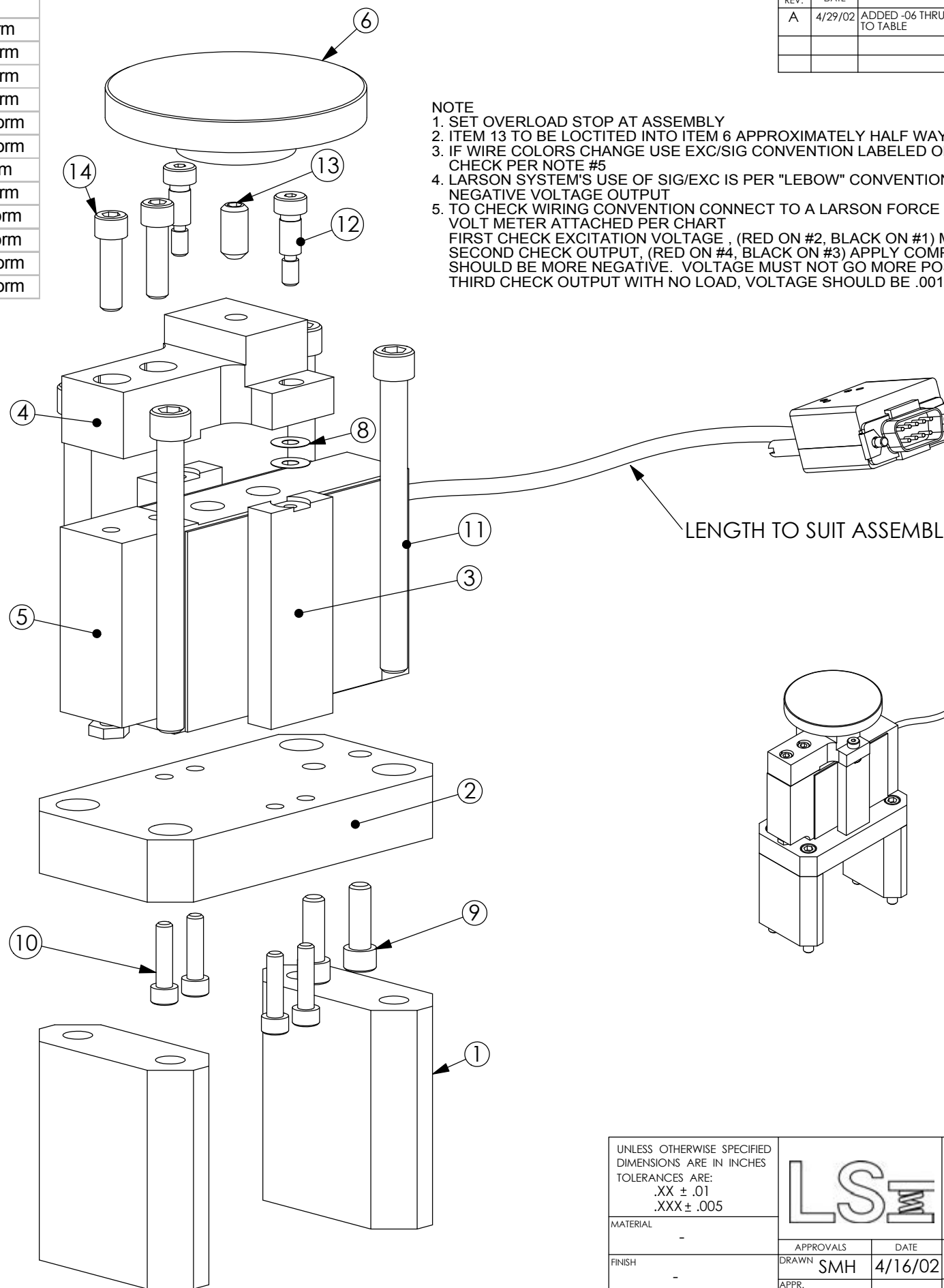
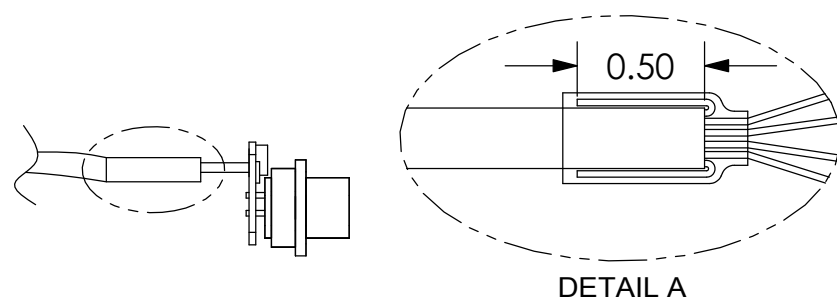
- NOTE
1. SET OVERLOAD STOP AT ASSEMBLY
  2. ITEM 13 TO BE LOCTITED INTO ITEM 6 APPROXIMATELY HALF WAY
  3. IF WIRE COLORS CHANGE USE EXC/SIG CONVENTION LABELED ON LOAD CELL, THEN CHECK PER NOTE #5
  4. LARSON SYSTEM'S USE OF SIG/EXC IS PER "LEBOW" CONVENTION, IE. COMPRESSIVE FORCE GIVES A NEGATIVE VOLTAGE OUTPUT
  5. TO CHECK WIRING CONVENTION CONNECT TO A LARSON FORCE METER THEN USE A VOLT METER ATTACHED PER CHART
- FIRST CHECK EXCITATION VOLTAGE, (RED ON #2, BLACK ON #1) MUST BE +5V. MUST NOT BE -VOLTAGE. SECOND CHECK OUTPUT, (RED ON #4, BLACK ON #3) APPLY COMPRESSIVE LOAD AND THE VOLTAGE SHOULD BE MORE NEGATIVE. VOLTAGE MUST NOT GO MORE POSITIVE WITH COMPRESSIVE LOAD THIRD CHECK OUTPUT WITH NO LOAD, VOLTAGE SHOULD BE .001 VDC > VOLTAGE > -.001 VDC




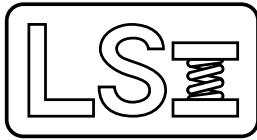
TEDEA LOAD CELL	WIRE COLOR	PIN #
+ EXC/INPUT	GREEN	#2
- EXC/INPUT	BLACK	#1
- SIG/OUTPUT	WHITE	#4
+ SIG/OUTPUT	RED	#3

LOAD CELL	VOLT METER WIRES	SMART CONNECTOR PIN #
+ EXC /INPUT	RED	#2
- EXC/INPUT	BLACK	#1
+ SIG/OUTPUT	RED	#4
- SIG/OUTPUT	BLACK	#3

- NOTE
1. ANY WIRES THAT ARE NOT USED ARE TO BE CUT OFF AND FOLDED BACK ONTO THE INSULATION, THEN COVERED WITH THE SHRINK TUBING. THESE WIRES MUST NOT TOUCH. REFER TO DETAIL A



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX ± .01 .XXX ± .005		 <b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182		
MATERIAL	-			APPROVALS
FINISH	-	DRAWN	SMH 4/16/02	ASSP Loadcell Assembly
HEAT TREAT	--	APPR.		DWG. NO. B 025-0000-508-XXA
SCALE: NONE				SHEET 1 OF 2



025-0000-0508-01 A

# Parts List

ASSP SFM Load Cell, 11 lb, Ø 3.00" Platform

Rev	By	Date	Description
	SMH	04-16-2002	
A	SMH	04-29-2002	added 06 thru -11, added Item 6 and description to table

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	2	018-0000-2338-00		Load Cell Standoff		in.
2	1	018-0000-2092-00	A	ASSP 200 Lb Load Cell Base		in.
3	2	018-0000-1447-00		Overload Stops, 50 & 100 lb Load Cell for		in.
4	1	018-0000-0995-01		Lower Platform Mount		in.
5	1	014-0000-0024-00		Load Cell - 11 lb (5 kg)		in.
6	1	018-0000-2339-00		Load Cell 3.00" Platform		in.
7	1	025-0000-0421-00	A	Smart Cell Connector Assembly		in.
8	AR	018-0000-0435-01	C	Shim - 0.195 ID, 0.450 OD, 0.0010 thick		in.
9	2	013-0000-0032-00		1/4-20 X 3/4 SHCS		in.
10	4	013-0000-0137-00		10-24 X 3/4 SHCS		in.
11	4	013-0000-0179-00		5/16-18 X 3 1/2 SHCS		in.
12	2	013-0000-0204-00		1/4 X 1/2 SHSS, SHOULDER SCREW 10-24TH		in.
13	1	013-0000-0132-00		5/16-18 X 5/8 SSS		in.
14	2	013-0000-0202-00		1/4-20 X 7/8 SHCS		in.
15						in.

Approved by:

Date:

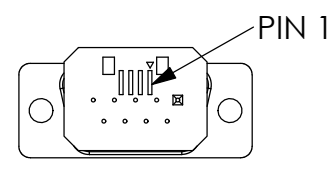
July 15, 2008

**SEE ATTACHED DRAWING**

025-0000-508-XX	DESCRIPTION	ITEM 5	ITEM 6	DESCRIPTION
025-0000-508-00	2 lbs	014-0000-028	018-0000-2339	2 lbs, Ø3.00 Platform
025-0000-508-01	11 lbs	014-0000-024	018-0000-2339	11 lbs, Ø3.00 Platform
025-0000-508-02	22 lbs	014-0000-037	018-0000-2339	22 lbs, Ø3.00 Platform
025-0000-508-03	66 lbs	014-0000-025	018-0000-2339	66 lbs, Ø3.00 Platform
025-0000-508-04	110 lbs	014-0000-023	018-0000-2339	110 lbs, Ø3.00 Platform
025-0000-508-05	200 lbs	014-0000-038	018-0000-2339	200 lbs, Ø3.00 Platform
025-0000-508-06	2 lbs	014-0000-028	018-0000-2099	2lbs, Ø1.00 Platform
025-0000-508-07	11 lbs	014-0000-024	018-0000-2099	11 lbs, Ø1.00 Platform
025-0000-508-08	22 lbs	014-0000-037	018-0000-2099	22 lbs, Ø1.00, Platform
025-0000-508-09	66 lbs	014-0000-025	018-0000-2099	66 lbs, Ø1.00, Platform
025-0000-508-10	110 lbs	014-0000-023	018-0000-2099	110 lbs, Ø1.00 Platform
025-0000-508-11	200 lbs	014-0000-038	018-0000-2099	200 lbs, Ø1.00 Platform

REV.	DATE	DESCRIPTION	DRW	APPROVED
A	4/29/02	ADDED -06 THRU -11, ADDED ITEM 6 AND DESCRIPTION TO TABLE	SMH	

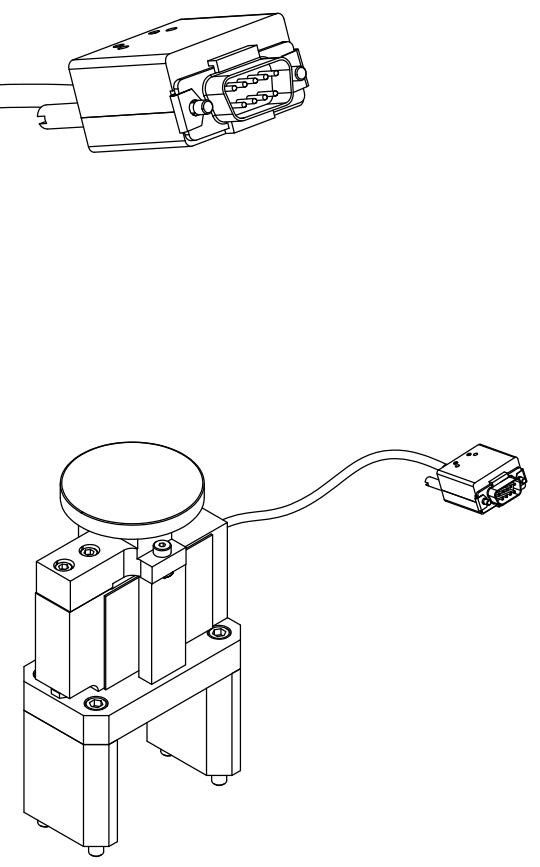
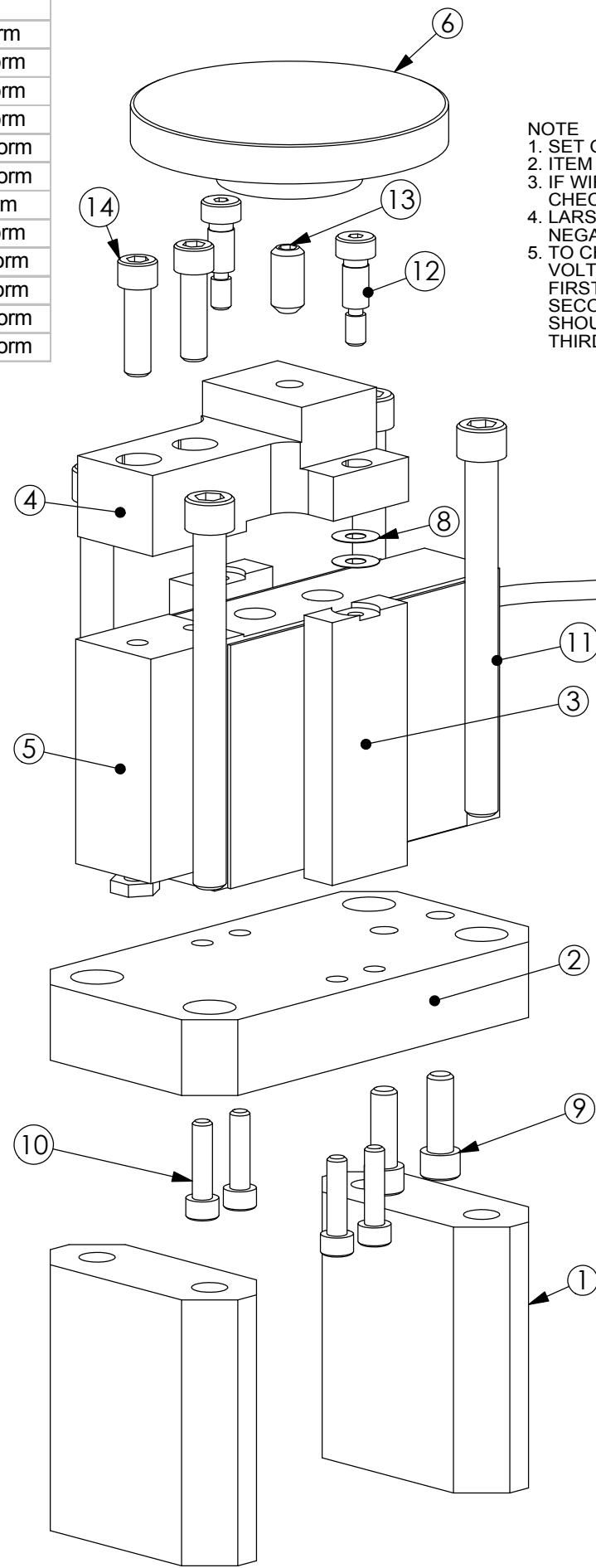
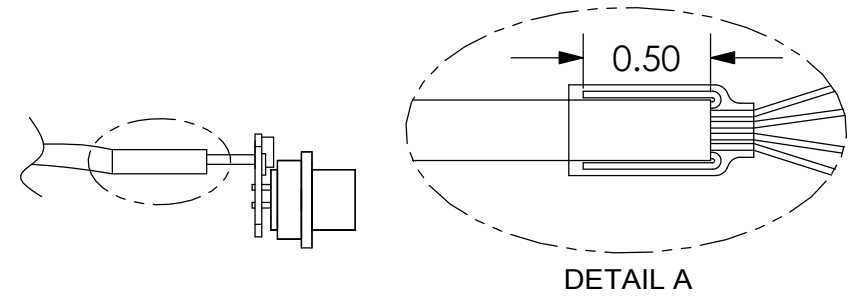
**NOTE**  
1. SET OVERLOAD STOP AT ASSEMBLY  
2. ITEM 13 TO BE LOCTITED INTO ITEM 6 APPROXIMATELY HALF WAY  
3. IF WIRE COLORS CHANGE USE EXC/SIG CONVENTION LABELED ON LOAD CELL, THEN CHECK PER NOTE #5  
4. LARSON SYSTEM'S USE OF SIG/EXC IS PER "LEBOW" CONVENTION, IE. COMPRESSIVE FORCE GIVES A NEGATIVE VOLTAGE OUTPUT  
5. TO CHECK WIRING CONVENTION CONNECT TO A LARSON FORCE METER THEN USE A VOLT METER ATTACHED PER CHART  
FIRST CHECK EXCITATION VOLTAGE, (RED ON #2, BLACK ON #1) MUST BE +5V. MUST NOT BE -VOLTAGE.  
SECOND CHECK OUTPUT, (RED ON #4, BLACK ON #3) APPLY COMPRESSIVE LOAD AND THE VOLTAGE SHOULD BE MORE NEGATIVE. VOLTAGE MUST NOT GO MORE POSITIVE WITH COMPRESSIVE LOAD  
THIRD CHECK OUTPUT WITH NO LOAD, VOLTAGE SHOULD BE .001 VDC > VOLTAGE > -.001 VDC




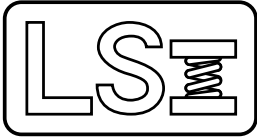
TEDEA LOAD CELL	WIRE COLOR	PIN #
+ EXC/INPUT	GREEN	#2
- EXC/INPUT	BLACK	#1
- SIG/OUTPUT	WHITE	#4
+ SIG/OUTPUT	RED	#3

LOAD CELL	VOLT METER WIRES	SMART CONNECTOR PIN #
+ EXC /INPUT	RED	#2
- EXC/INPUT	BLACK	#1
+ SIG/OUTPUT	RED	#4
- SIG/OUTPUT	BLACK	#3

**NOTE**  
1. ANY WIRES THAT ARE NOT USED ARE TO BE CUT OFF AND FOLDED BACK ONTO THE INSULATION, THEN COVERED WITH THE SHRINK TUBING. THESE WIRES MUST NOT TOUCH. REFER TO DETAIL A



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX ± .01 .XXX ± .005		 <b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182		
MATERIAL	-			
FINISH	-	APPROVALS	DATE	ASSP Loadcell Assembly
HEAT TREAT	--	DRAWN	SMH 4/16/02	
			APPR.	DWG. NO.
			APPR.	B 025-0000-508-XXA
				SCALE: NONE
				SHEET 1 OF 2



025-0000-0508-03 A

# Parts List

ASSP SFM Load Cell, 66 lb, Ø 3.00" Platform

Rev	By	Date	Description
	SMH	04-16-2002	
A	SMH	04-29-2002	added 06 thru -11, added Item 6 and description to table

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	2	018-0000-2338-00		Load Cell Standoff		in.
2	1	018-0000-2092-00	A	ASSP 200 Lb Load Cell Base		in.
3	2	018-0000-1447-00		Overload Stops, 50 & 100 lb Load Cell for		in.
4	1	018-0000-0995-01		Lower Platform Mount		in.
5	1	014-0000-0025-00		Load Cell - 66 lb (30 kg)		in.
6	1	018-0000-2339-00		Load Cell 3.00" Platform		in.
7	Ref	025-0000-0421-00	A	Smart Cell Connector Assembly		in.
8	AR	018-0000-0435-01	C	Shim - 0.195 ID, 0.450 OD, 0.0010 thick		in.
9	2	013-0000-0032-00		1/4-20 X 3/4 SHCS		in.
10	4	013-0000-0137-00		10-24 X 3/4 SHCS		in.
11	4	013-0000-0179-00		5/16-18 X 3 1/2 SHCS		in.
12	2	013-0000-0204-00		1/4 X 1/2 SHSS, SHOULDER SCREW 10-24TH		in.
13	1	013-0000-0132-00		5/16-18 X 5/8 SSS		in.
14	2	013-0000-0202-00		1/4-20 X 7/8 SHCS		in.

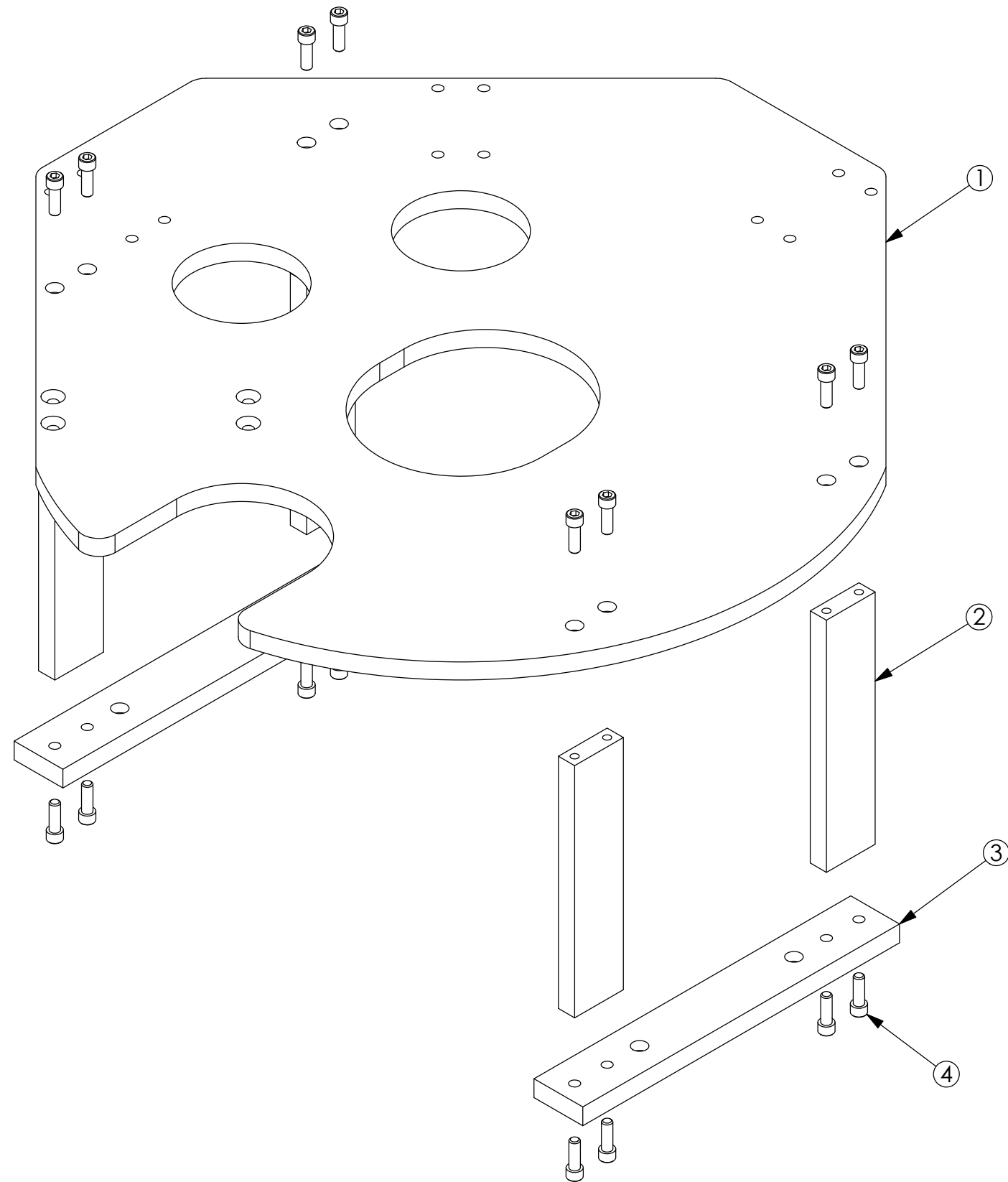
Approved by:

Date:


July 15, 2008

**SEE ATTACHED DRAWING**

REV.	DATE	DESCRIPTION	DRW	APPROVED



ITEM NO.	QTY.	PART NO.	DESCRIPTION
4	16	013-0000-0032-00	1/4-20 X 3/4 SHCS
3	2	018-0000-2095-00	Bottom Plate Front
2	4	018-0000-2094-00	Spring Support Table Leg
1	1	018-0000-2097-02	Spring Support Plate

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: .XX ± .01 .XXX ± .005		 <b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182
MATERIAL	-	
FINISH	-	APPROVALS      DATE DRAWN <b>SMH</b> 4/10/02 APPR.
HEAT TREAT	--	DWG. NO. <b>B</b> 025-0000-461-02 SCALE: NONE      SHEET 1 OF 1





**025-0000-0461-02**  
**SPRING SUPPORT TABLE**

# Parts List

Rev	By	Date	Description
	KMP	11-05-2007	

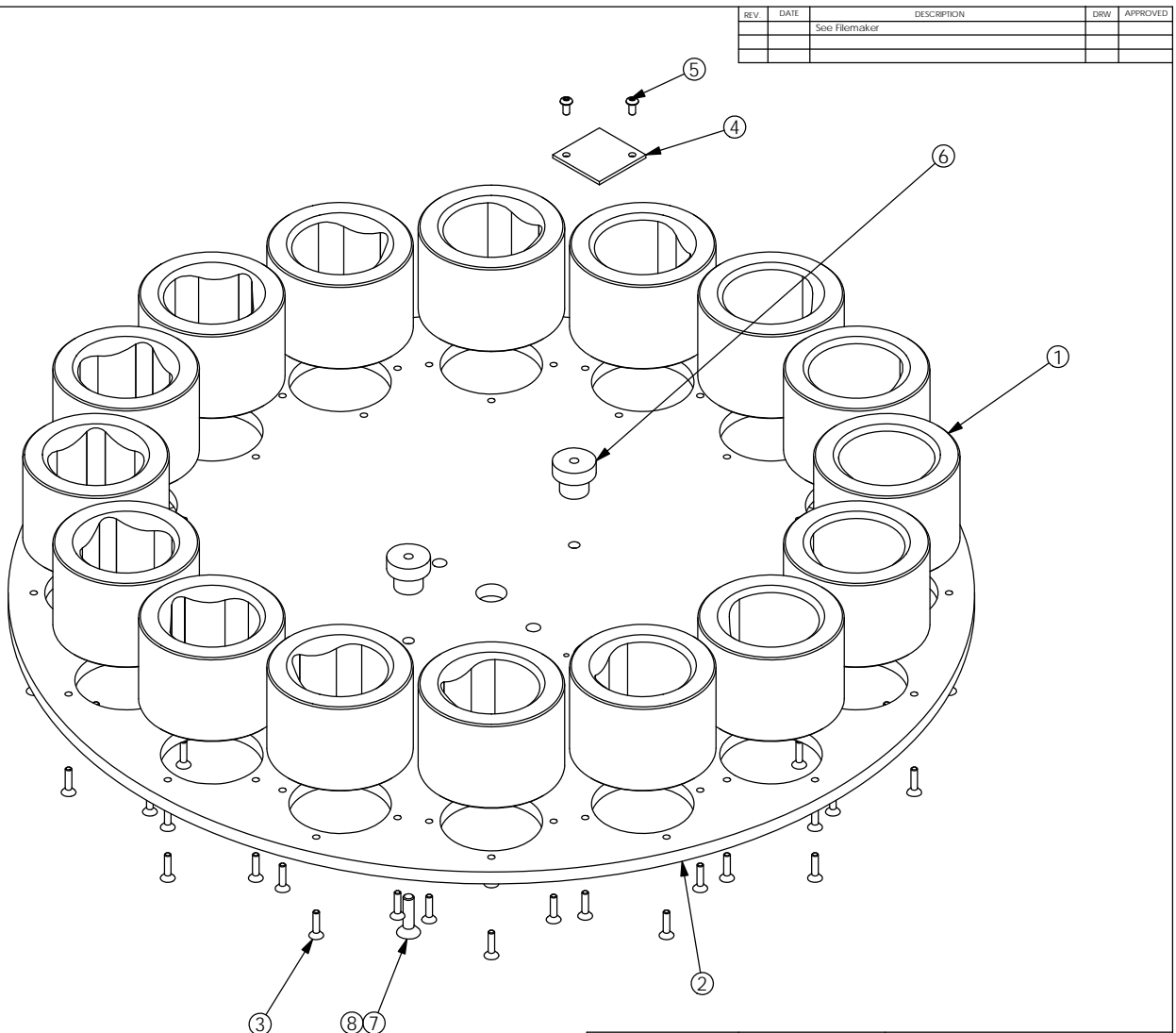
Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	018-0000-2097-02	A	Spring Support Plate Ark		in.
2	4	018-0000-2094-00		SPRING SUPPORT PLATE LEG		in.
3	2	018-0000-2095-00		BOTTOM FLATE FRONT		in.
4	16	013-0000-0032-00		1/4-20 X 3/4 SHCS		in.

Approved by: 

Date: October 21, 2013

**SEE ATTACHED DRAWING**

025-0000-0511-XX	Item 1	Description (ID)
-00	018-0000-2337-00	.547
-01	-01	.547
-02	-02	1.400
-03	-04	.625
-04	-05	.500
-05	-03	1.062
-08	-09	.467
-09	-10	1.125
-10	-11	.650
-11	-12	.429
-12	-13	.457
-13	-14	.658
-14	-15	.945
-15	-16	.705
-16	-17	.524
-17	-18	1.385
-18	-19	1.472
-19	018-0000-3063-00	.453
-20	-20	1.060
-21	-21	.5/1.5
-22	-22	.484
-23	-23	.539
-24	-24	.578
-25	-25	.554
-26	-26	.880
-27	-27	.586
-28	-28	1.362
-29	-29	.759
-30	-30	.85
-31	-31	.354
-32	-32	.232
-33	-33	.21
-34	-34	.811
-35	-35	.901
-36	-36	.527
-37	-37	.732
-38	-38	.800
-39	-39	.958
-40	-40	.421
-41	-41	.272
-42	-42	.197
-43	-43	.500
-44	-44	.559
-45	-45	1.056
-46	-46	.799
-47	-47	1.039



REV.	DATE	DESCRIPTION	DRW	APPROVED
		See Filemaker		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: XX ± .01 XXX ± .005		<b>LSI</b>	<b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182	
MATERIAL	-		APPROVALS	DATE
FINISH	-	DRAWN	SMH	4/18/02
HEAT TREAT	--	APPR.		
			DWG. NO.	B 025-0000-511-XXW
			SCALE: NONE	SHEET 1 OF 2



**025-0000-0511-21 W**

# Parts List

Indexer Plate Assembly, 16 station, ".5 ID MIN x 2.00"

Rev	By	Date	Description
T	DAL	05-14-2013	Added -37, -38, -39, -40
U	RRS	06-28-2013	Add -41 & -42
V	RRS	09-11-2013	Add -43
W	RRS	10-28-2013	Add -44, -45, -46, -47

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	16	018-0000-2337-21	W	Spring Bushing, .500 Min thru 1.500 Max OD		in.
2	1	018-0000-1371-05	C	Indexer Plate, 16 Position		in.
3	64	013-0000-0019-00		4-40 X 1/2 FHSCS		in.
4	1	018-0000-2425-00		Indexer Plate, Home Position Cover		in.
5	2	013-0000-0020-00		4-40 X 1/4 BHCS		in.
6	2	013-5000-0215-00		Hand Knob, Index plate		in.
7	2	013-0000-0088-00		10-24 X 3/4 FHSCS		in.
8	Ref	012-2000-0013-00		Loctite 242 (Blue) Medium Strength		in.

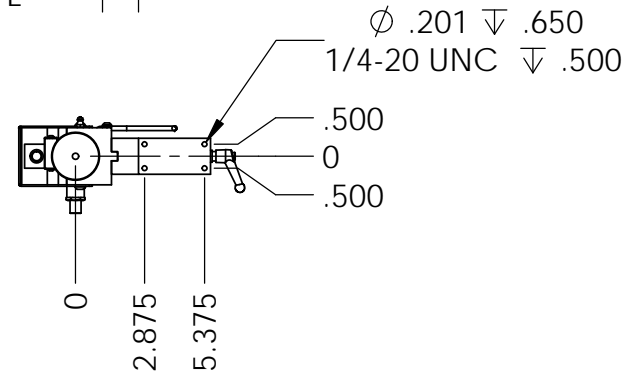
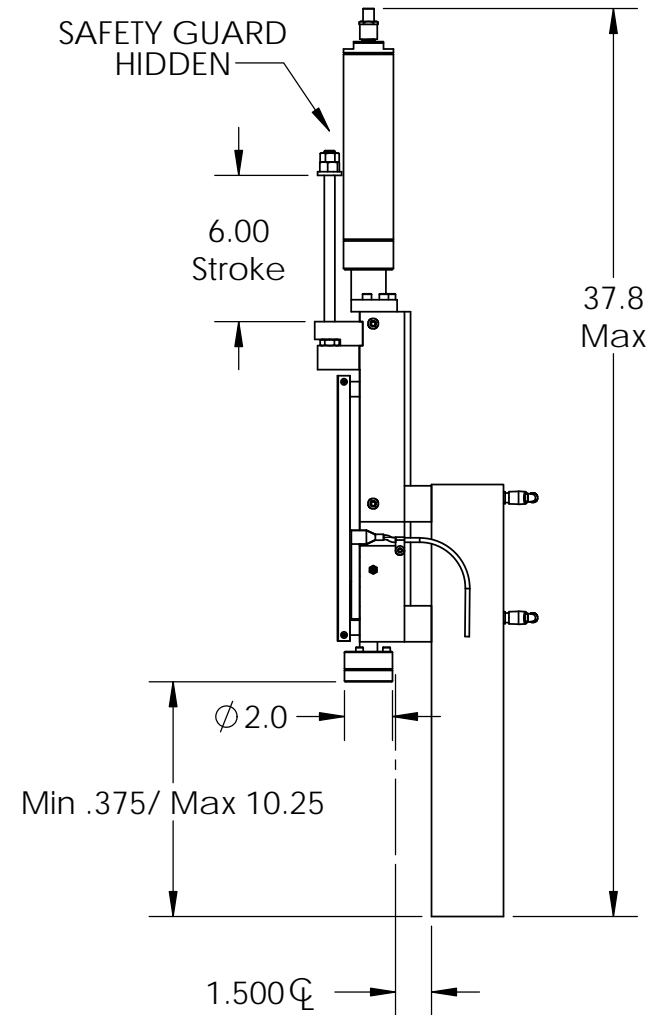
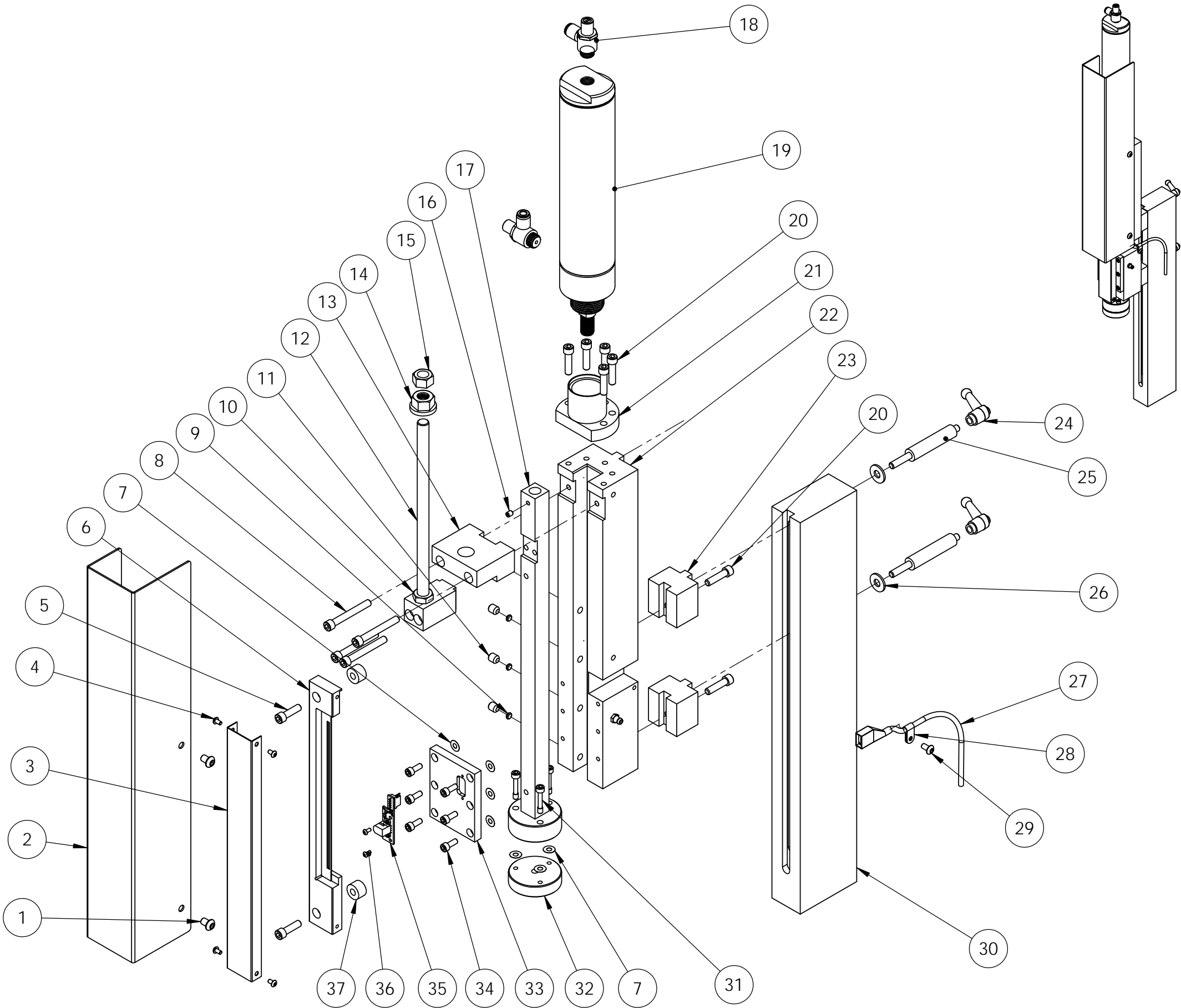
Prototype Design allowing spring to be pushed into position, then rotate back for clearance.

Approved by: 

Date: November 1, 2013

**SEE ATTACHED DRAWING**

REV	DATE	DESCRIPTION	DRW	APP



		<b>LARSON SYSTEMS INC.</b>	
		10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182	
APPROVALS	DATE	<i>ASSP - Power head with linear scale</i> DWG. NO. 025-0000-0937-00A SCALE: NONE	
DRAWN DAL	10/25/13		
APP.			
APP.			
		B	REV:
		SHEET 1 OF 3	



025-0000-0937-00 A

# Parts List

ASSP - Power head with linear scale

Rev	By	Date	Description
	DAL	10-21-2013	
A	RRS	12-24-2013	Add items 1, 2, 10 & 23, Item 20 qty is 7 was 5, renumbered

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	4	013-0000-0128-00		1/4-20 X 3/8 BHSCS		in.
2	1	018-0000-3575-00		Safety Shield, Test station w/ linear scale, ASSP		in.
3	1	018-0000-2217-00	B	Encoder Cover		in.
4	4	013-0000-0077-00		6-32 X 1/4 BHCS		in.
5	2	013-0000-0202-00		1/4-20 X 7/8 SHCS		in.
6	1	025-0000-0484-00	B	Glass Scale Assembly		in.
7	AR	018-0000-0435-01	C	Shim - 0.195 ID, 0.450 OD, 0.0010 thick		in.
7	AR	018-0000-0435-03	C	Shim - 0.195 ID, 0.450 OD, 0.0050 thick		in.
7	AR	018-0000-0435-04	C	Shim - 0.195 ID, 0.450 OD, 0.0015 thick		in.
8	4	013-0000-0254-00		1/4-20 X 2 SHCS		in.
9	4	018-0000-1036-00	A	Brass Wear Pad		in.
10	1	013-0000-0583-00		7/16"-20, 11/16" Width, 1/4" Height hex nut		in.
11	7	013-0000-0242-00		5/16-18 X 3/4 SSSCPPT		in.
12	1	018-0000-3567-00		ASSP Power head stop weldment		in.
13	1	018-0000-3565-00	A	ASSP, Power head stop mount		in.
14	1	013-0000-0582-00		7/16-20 Steel Flange Nut		in.
15	1	013-0000-0288-00		7/16-20 Jam Nut (black finish)		in.
16	1	013-0000-0121-00		10-32 X 1/4 SSS		in.
17	1	018-0000-3563-00	A	ASSP, Power head slide		in.
18	2	019-0000-0201-00		FLOW CONTROL 1/4" NPTM x 1/4" tube 90°		in.
19	1	019-0000-0200-00		Air Cylinder 2" dia x 6" stroke		in.
20	7	013-0000-0064-00		1/4-20 X 1 SHCS		in.
21	1	018-0000-3564-00		ASSP, Power head cylinder mount		in.
22	1	018-0000-3562-00	B	ASSP, Power head mount		in.
23	2	018-0000-3574-00		Extension block, Test station w/ linear scale, ASSP		in.
24	2	013-5000-0122-00		Adjustable Handle		in.
25	2	018-0000-1978-00		ASSP ADJ. HANDLE STAND OFF		in.
26	2	013-2000-0056-00		1/4" FLAT WASHER - ZINC		in.
27	1	025-1000-0664-00		Cable, Scale to SDHT, ASSP		in.
28	1	013-3000-0023-00		Cable Clamp, 3/16" Dia.		in.

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

**SEE ATTACHED DRAWING**



025-0000-0937-00 A

# Parts List

ASSP - Power head with linear scale

Rev	By	Date	Description
	DAL	10-21-2013	
A	RRS	12-24-2013	Add items 1, 2, 10 & 23, Item 20 qty is 7 was 5, renumbered

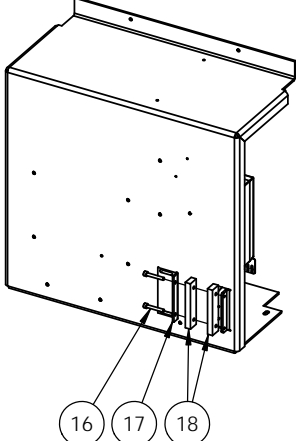
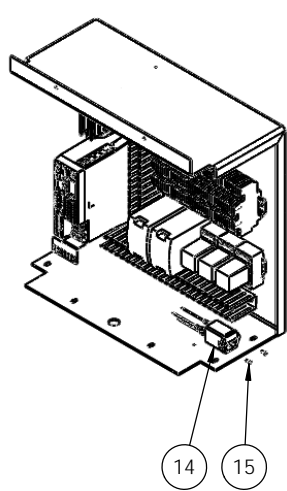
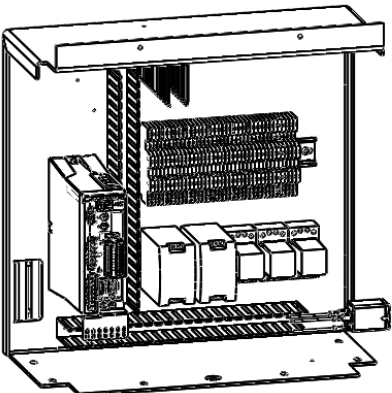
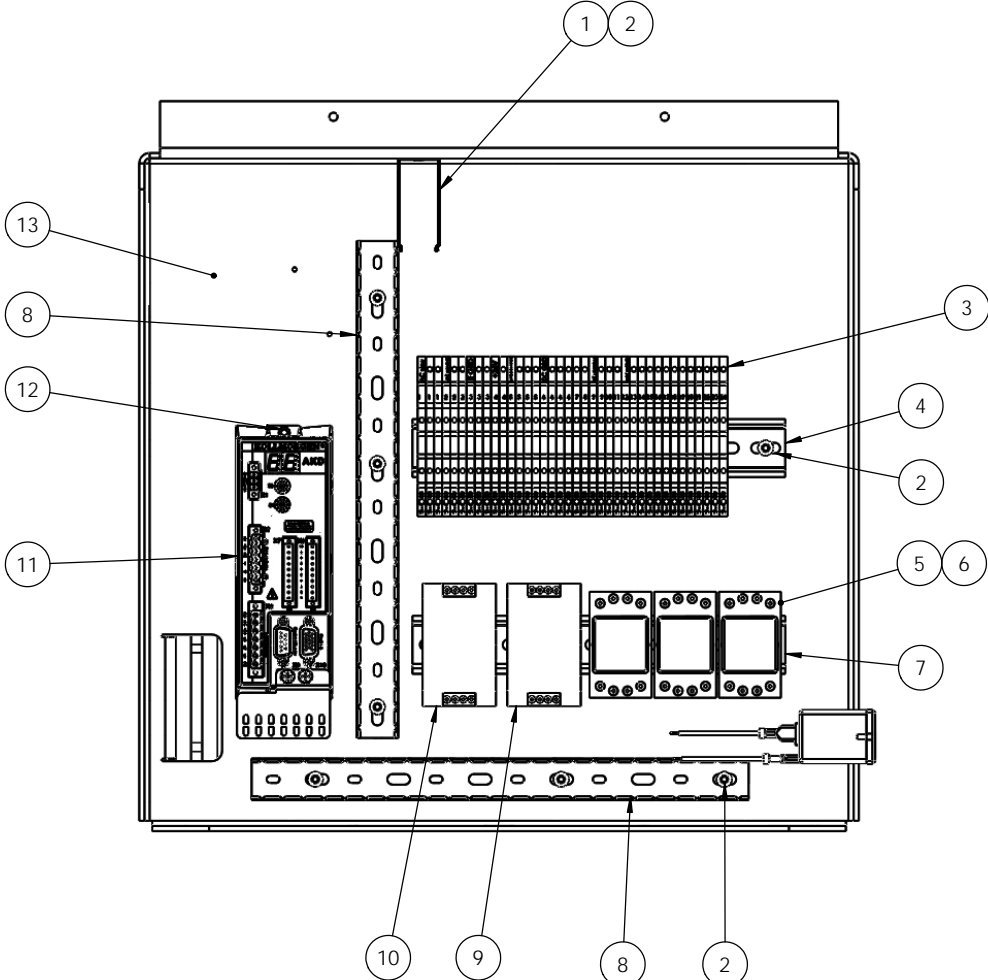
Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
29	1	013-0000-0052-00		10-32 X 3/8 BHSCS		in.
30	1	018-0000-1745-01	A	PRESET STATION STAND, 18"L, ASSP mount		in.
31	3	018-0000-1732-02	B	10-32 Custom Screws for Platform Alignment		in.
32	1	018-0000-1044-00	C	2" DIA Upper Platform		in.
33	1	018-0000-2218-00	B	Front Plate (for LSI Encoder)		in.
34	6	013-0000-0196-00		10-32 X 1/2 SHCS		in.
35	1	025-1000-0351-00	A	Encoder PCB Assembly		in.
36	2	013-0000-0020-00		4-40 X 1/4 BHCS		in.
37	2	018-0000-2222-00		ENCODER SPACER		in.

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

**SEE ATTACHED DRAWING**

REV	DATE	DESCRIPTION	DRW	APP



		<b>LARSON SYSTEMS INC.</b> 10073 Baltimore St. NE PH. 763-780-2131 Mpls., MN 55449 FAX. 763-780-2182	
		<i>Electronics Layout, ASSP</i>	
APPROVALS	DATE	B DWG. NO. 025-0000-0316-05A REV:	
DRAWN RRS	10/16/13		
APP.			
SCALE: NONE		SHEET 1 OF 3	







025-0000-0316-05 A

# Parts List

Power Control Box Assem w/ 3 way sorter

Rev	By	Date	Description
	RRS	10-22-2013	
A	RRS	12-16-2013	Item 3 qty is 39 was 35 Items 1 & 8 is 013-4000-009-01 was -00

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	013-4000-0009-01		WIRING DUCT WITH COVER, 1" X 2.25"		7 in.
2	16	013-0000-0120-00		10-24 X 1/4 BHSCS		in.
3	39	009-4000-0030-00		TERMINAL BLOCK, Cross Connected, SCREWLESS		in.
4	1	018-0000-3461-02	A	Din Rail - 9" Length		in.
5	3	007-4000-0008-00		10A DPDT 24V DC Relay		in.
6	3	007-4000-0009-00		Socket, Relay		in.
7	1	018-0000-3461-02	A	Din Rail - 9" Length		in.
8	2	013-4000-0009-01		WIRING DUCT WITH COVER, 1" X 2.25"		12 in.
9	1	011-0000-0039-00		24VDC SUPPLY FOR ASSP, 50W, DIN-RAIL		in.
10	1	011-0000-0051-00		6V Power supply, 85-264V in Din Rail Mount		in.
11	1	011-3000-0022-00		Drive, AKD-P00306-NBAN-0000		in.
12	2	013-0000-0058-00		8-32 X 3/8 SHCS		in.
13	ref	018-0000-3556-00	A	Enclosure Panel, ASSP		in.
14	1	025-1000-0591-00	A	ASSP MAIN AC POWER ENTRY ASSEMBLY		in.
15	2	013-0000-0054-00		4-40 X 3/8 FHSCS		in.
16	2	013-0000-0071-00		10-24 X 1 1/4 SHCS		in.
17	1	018-0000-2180-02	E	STRAIN RELIEF, MOVEABLE		in.
18	2	018-0000-2181-01	F	STRAIN RELIEF RUBBER STRIP 3.375		in.
19	Ref	025-2000-0163-02	A	Schematic ASSP, Ark Tech. Three place sorter		in.

Approved by: \_\_\_\_\_

Date: \_\_\_\_\_

**SEE ATTACHED 2 DRAWINGS**



**Larson Systems Inc.**  
10073 Baltimore Street NE  
Minneapolis, MN 55449-4425  
[www.larsonsystems.com](http://www.larsonsystems.com)

763-780-2131  
1-877-780-2131  
Fax: 763-780-2182  
[info@larsonsystems.com](mailto:info@larsonsystems.com)

