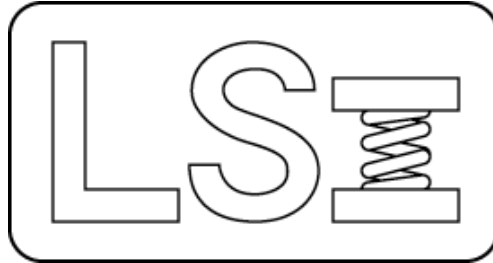


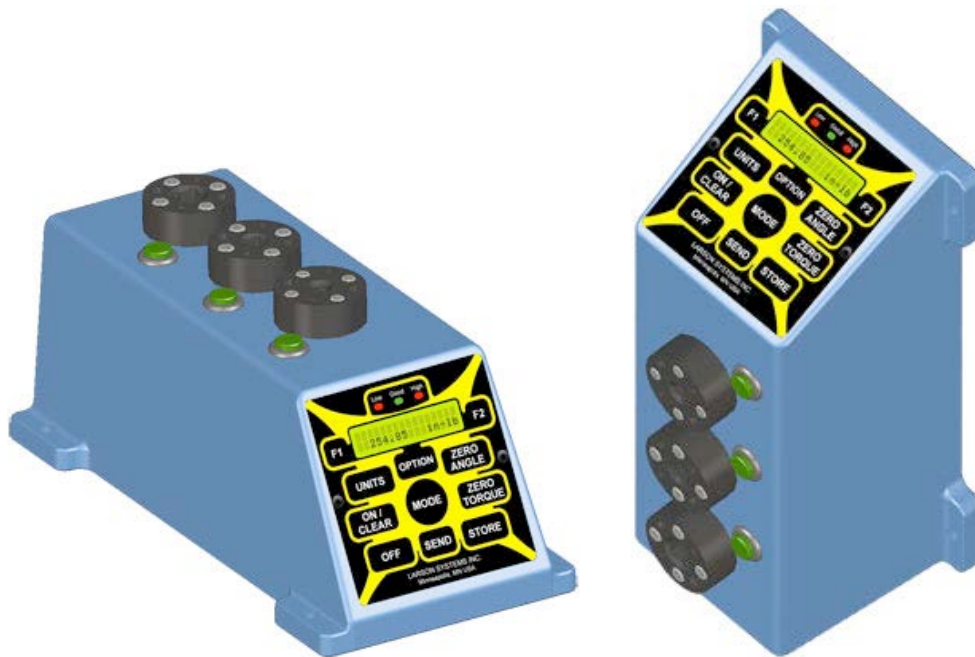
# *Larson Systems Inc.*



## *UTWCS Parts List*

*050-0000-0134-01*

*Ultra Torque Wrench Calibration System  
Custom Double Load Cell Configuration*



(Triple Load Cell Model Shown)



050-0000-0134-01

# Parts List

UTWCS - Double Load Cells (add load cell prices)

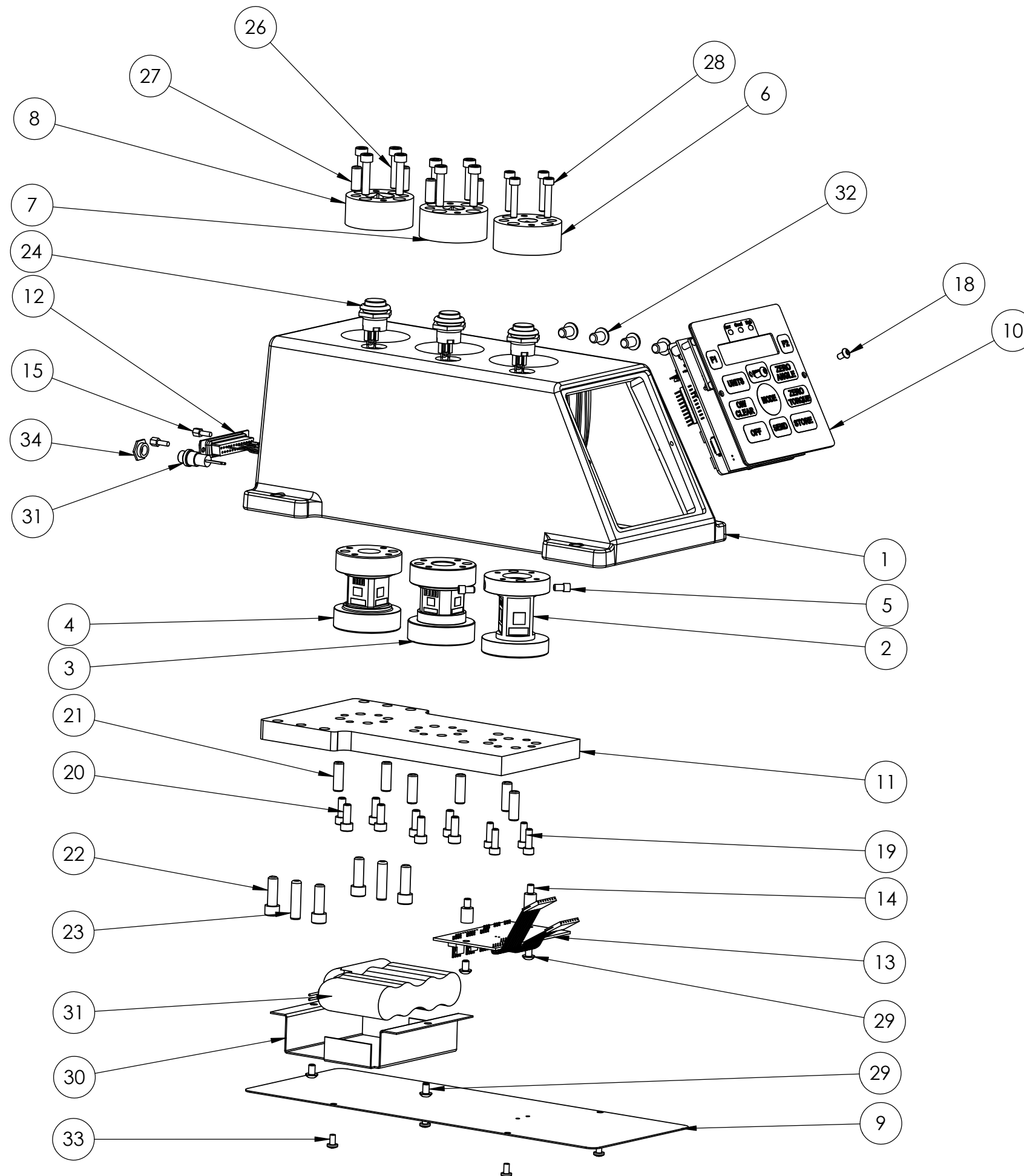
Rev	By	Date	Description
	KMP	11-30-2006	

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	025-0000-0454-02	B	STWCS Two load Cell Assembly (add load cell prices)		in.
2	1	060-1000-0045-00	E	User Manual - TWCS Series		in.
3	1	059-0000-0038-00	A	Shipping Crate - TWCS Series		in.
4	1	025-1000-0396-00		Power Supply, 100-240 VAC 50-60 Hz (USA Plug)		in.
5	1	060-2000-0035-02	A	Parts List - UTWCS Double Load Cell (Custom)		in.
6	1	025-6000-0008-01		Sticker Assembly - UTWCS Series		in.
7	1	025-2000-0132-00	A	Schematic, UTWCS Triple Torque Cell Assembly		in.

Approved by: *David Zamora*

Date: June 1, 2007


REV	DATE	DESCRIPTION	DRW	APP
		SEE SHEET 4		

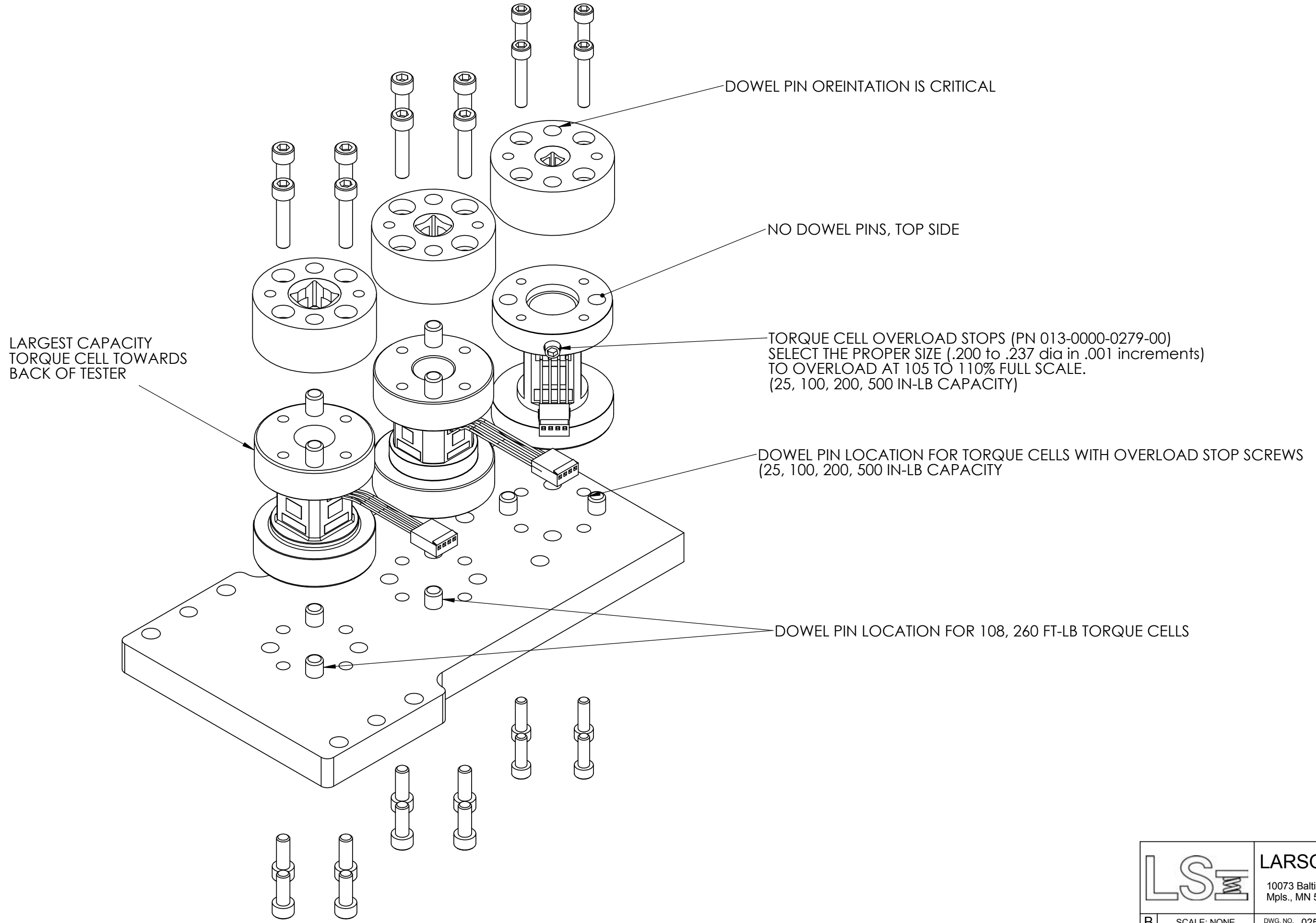


NOTE: SET UP LOAD CELL SELECTOR LIGHTS/ BUTTONS (SOFTWARE VS 4.25 AND EARLIER)

(CHANGE POLARITY OF OUTPUTS 6, 7 AND 8)

1. TURN TESTER ON
2. PRESS "OPTION" 5 TIMES TO "USERS SETUP" SCREEN
3. PRESS "F1"
4. SCREEN PROMPTS FOR PASSWORD, PRESS "UNITS", "SEND", "F1"
5. USER SETUP SCREEN IS DISPLAYED, PRESS "OPTION" 6 TIMES TO DISPLAY "I/O POLARITY"
6. PRESS "F1" TO DISPLAY INPUT SCREEN
7. PRESS "OPTION" TO DISPLAY OUTPUT SCREEN
8. PRESS "F1" TO ADVANCE THE CURSER TO OUTPUT #6
9. PRESS "F2" TO CHANGE OUTPUT #6 FROM L TO H
10. PRESS "F1" TO ADVANCE THE CURSER TO OUTPUT #7
11. PRESS "F2" TO CHANGE OUTPUT #7 FROM L TO H
12. PRESS "F1" TO ADVANCE THE CURSER TO OUTPUT #8
13. PRESS "F2" TO CHANGE OUTPUT #8 FROM L TO H

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 -	DRAWN KMP	10-26-06	STWCS Three load Cell Assembly
HEAT TREAT -	APP. -	APP. -	B DWG. NO. 025-0000-0454-XXB
SCALE: NONE			SHEET 1 OF 6



DOWEL PIN OREINTATION IS CRITICAL

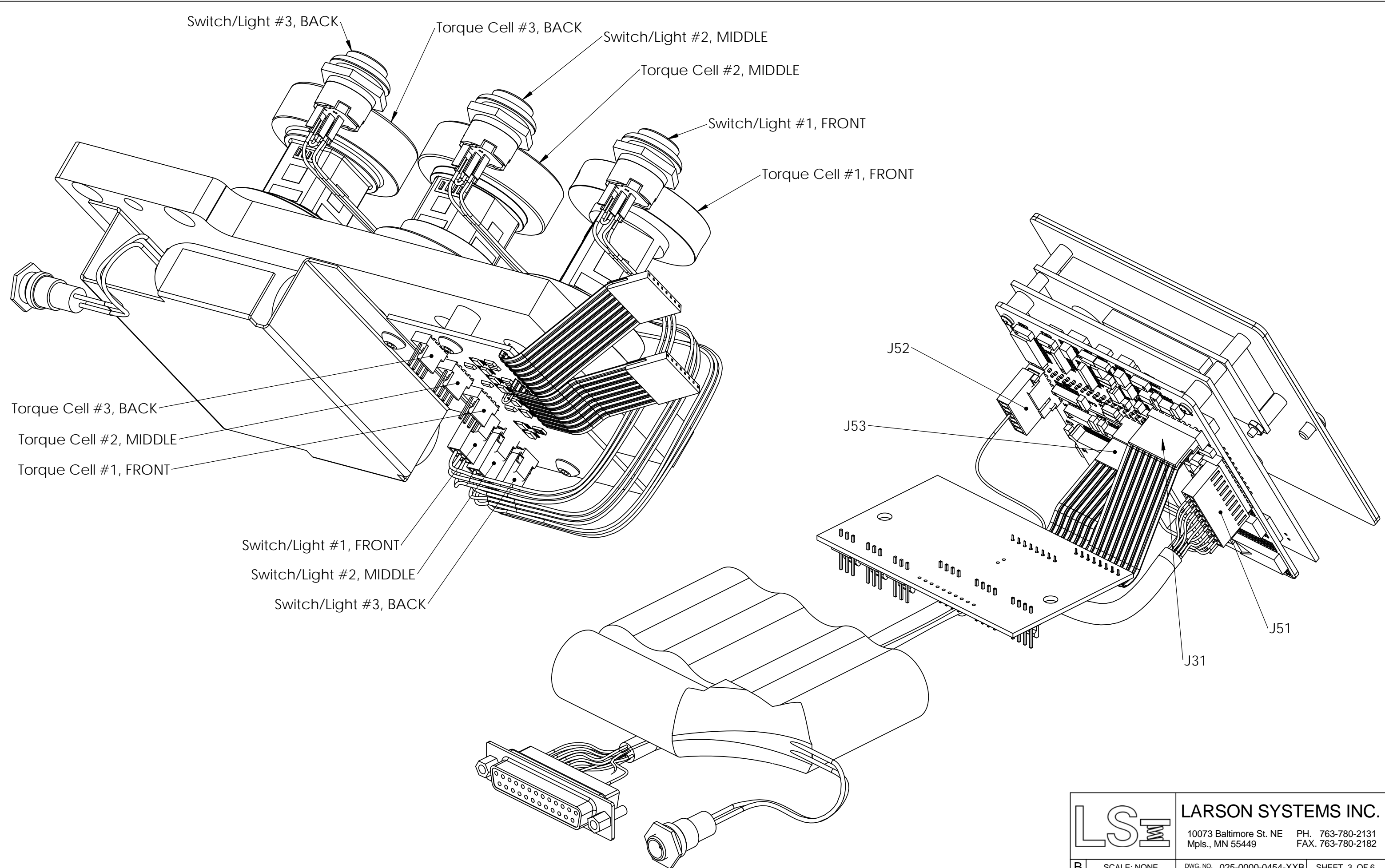
NO DOWEL PINS, TOP SIDE

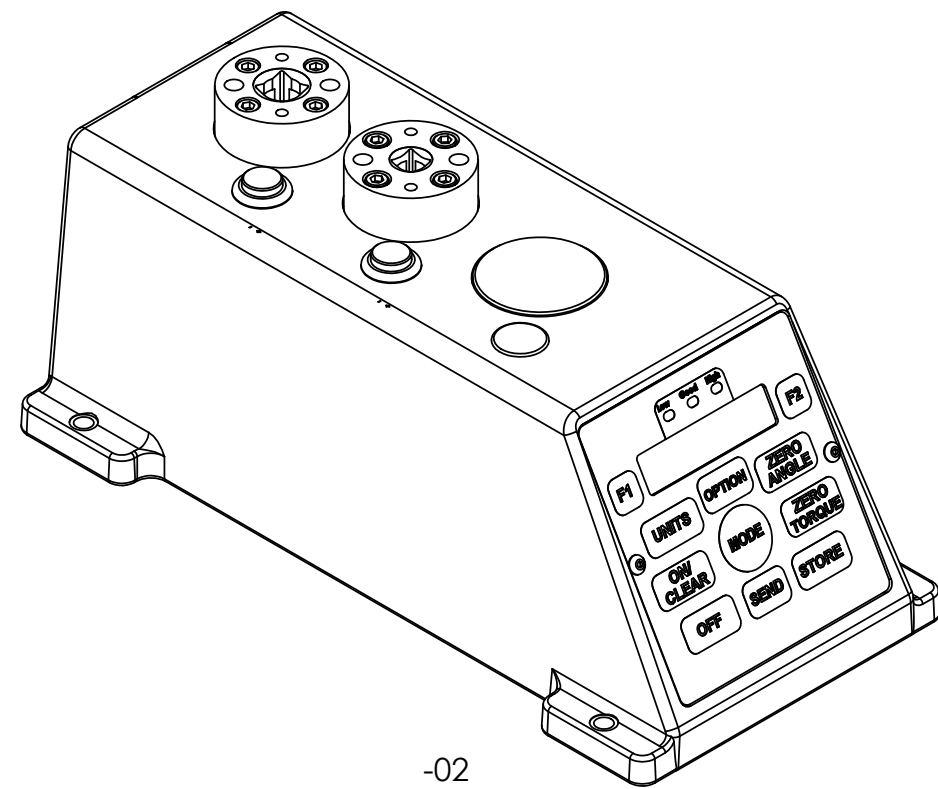
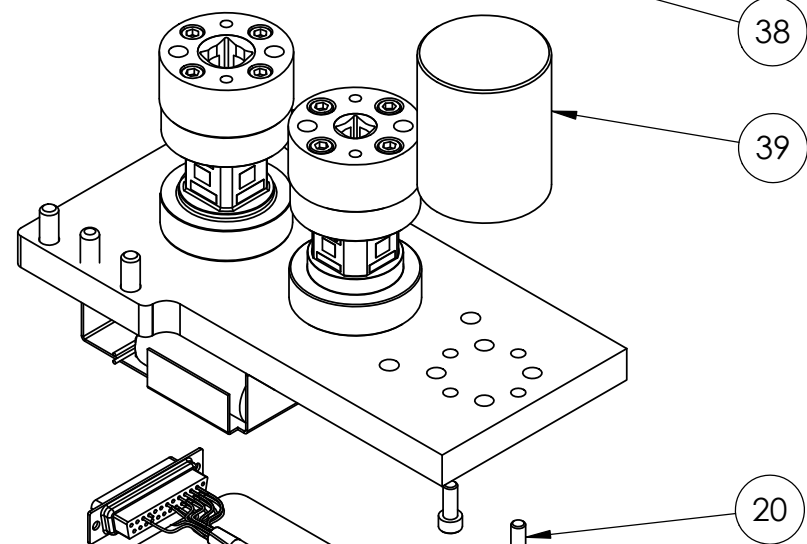
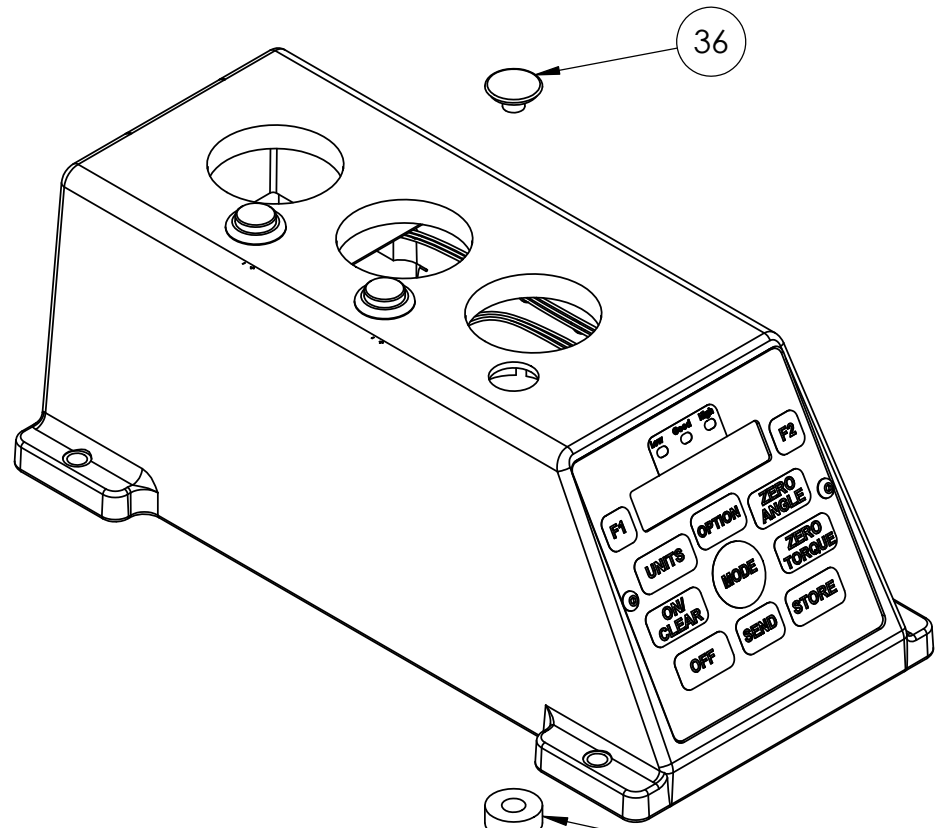
LARGEST CAPACITY TORQUE CELL TOWARDS BACK OF TESTER

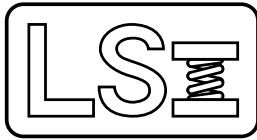
TORQUE CELL OVERLOAD STOPS (PN 013-0000-0279-00) SELECT THE PROPER SIZE (.200 to .237 dia in .001 increments) TO OVERLOAD AT 105 TO 110% FULL SCALE. (25, 100, 200, 500 IN-LB CAPACITY)

DOWEL PIN LOCATION FOR TORQUE CELLS WITH OVERLOAD STOP SCREWS (25, 100, 200, 500 IN-LB CAPACITY)

DOWEL PIN LOCATION FOR 108, 260 FT-LB TORQUE CELLS







# 025-0000-0454-02 B

# Parts List

## STWCS Two load Cell Assembly (add load cell prices)

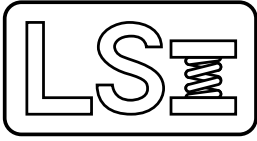
Rev	By	Date	Description
	KMP	10-26-2006	
A	DAL	04-30-2008	del 4 ea #18 013-0000-0077-00 added 4ea 013-0000-0195-00, del 025-1000-0251-00, del 018-0000-2160-00
B	DAL	07-14-2009	Added pages 2,3,4 and note on page 1

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
1	1	018-0000-1884-01	B	STWCS Three Load Cells Housing		in.
2	Ref	025-0000-0697-00	A	Torque Cartridge - 25 in-lb (1/4" Drive Sug)		in.
2	Ref	025-0000-0697-01	A	Torque Cartridge - 100 in-lb (1/4" Drive Sug)		in.
2	Ref	025-0000-0697-02	A	Torque Cartridge - 200 in-lb (1/4" Drive Sug)		in.
3	Ref	025-0000-0697-03	A	Torque Cartridge - 500 in-lb (3/8" Drive Sug)		in.
3	Ref	025-0000-0697-04	A	Torque Cartridge - 108 ft-lb (3/8" Drive Sug)		in.
4	Ref	025-0000-0697-05	A	Torque Cartridge - 260 ft-lb (1/2" Drive Sug)		in.
5	Ref	013-0000-0279-00		8-32 X 1/4 SHCS, Stainless		in.
6	Ref	018-0000-2468-00	A	1/4 Drive Adapter, TWCS, 1.25 Dia BC, 8-32 screws		in.
6	Ref	018-0000-2468-01	A	1/4 Drive Adapter, TWCS, 1.25 Dia BC, 10-32 screws		in.
7	Ref	018-0000-1892-02	E	3/8 Drive Adapter, TWCS, 1.25 Ø BC, 10-32 screws		in.
7	Ref	018-0000-1892-00	E	3/8 Drive Adapter, TWCS, 1.25 Dia BC, 8-32 screws		in.
8	Ref	018-0000-1674-02	K	1/2 Drive Adapter, TWCS, 1.25 Dia BC, 10-32 screws		in.
9	1	018-0000-0877-00	E	Base Bottom Cover		in.
10	1	025-0000-0345-00	D	Front Panel Assembly - TST / STWCS		in.
11	1	018-0000-2897-00	B	Mounting Plate, 3 Load Cell, STWCS		in.
12	1	025-1000-0287-03	K	INTERNAL RS232 CABLE TO TRI-CELL SDHT		in.
13	1	025-1000-0557-00		Three Load Cell STWCS PCB Assy		in.
14	2	018-0000-2845-00		Stand Off 8-32 x .375 Male-Female		in.
15	2	013-1000-0010-00		Female Screw Lock		in.
18	2	013-0000-0077-00		6-32 X 1/4 Button Head Cap Screw		in.
19	Ref	013-0000-0181-00		8-32 X 1/2 SHCS		in.
20	10	013-0000-0196-00		10-32 X 1/2 SHCS		in.
21	4	013-2000-0172-00		1/4 X 3/4" Dowel Pin		in.
22	4	013-0000-0087-00		1/4-28 X 3/4 SHCS		in.
23	2	013-2000-0057-00		1/4 X 1" DOWEL PIN		in.
24	2	025-1000-0554-00		Switch / Light, 3 Load Cell STWCS		in.
26	8	013-0000-0294-00		10-32 X .875 SHCS		in.
27	4	013-2000-0210-00		1/4 x 5/8 dowel pin		in.
28	Ref	013-0000-0295-00		8-32 X 7/8 SHCS		in.

Approved by: 

Date: July 14, 2009

**SEE ATTACHED 4 DRAWINGS**



**025-0000-0454-02 B**

# Parts List

STWCS Two load Cell Assembly (add load cell prices)

Rev	By	Date	Description
	KMP	10-26-2006	
A	DAL	04-30-2008	del 4 ea #18 013-0000-0077-00 added 4ea 013-0000-0195-00, del 025-1000-0251-00, del 018-0000-2160-00
B	DAL	07-14-2009	Added pages 2,3,4 and note on page 1

Item	Qty	Part Number	Rev	Part Name	PCB Location	Part Length
29	4	013-0000-0028-00		8-32 X 1/4 BHSCS		in.
30	1	018-0000-1831-01	B	Battery Retainer for SFM ( No PEM Nuts)		in.
31	1	025-1000-0240-00	N	Rechargeable Battery, 6V, SDHT, molex connector		in.
32	4	013-0000-0128-00		1/4-20 X 3/8 BHSCS		in.
33	4	013-0000-0195-00		6-32 X 1/4 Phillips Pan Machine Screw		in.
34	1	018-0000-2160-00	A	Power Jack Nut / Insulator		in.
35	Ref	018-1000-0048-00		Alignment Fixture, UTWCS		in.
36	1	018-0000-2906-00		Switch Plug, STWCS 3 Load Cell		in.
37	1	018-0000-2906-01		Switch Plug Spacer, STWCS 3 Load Cell		in.
38	1	013-0000-0120-00		10-24 X 1/4 BHSCS		in.
39	1	018-0000-2905-00	A	Load Cell Plug, STWCS 3 Load Cell		in.

Approved by:

Date:

July 14, 2009

**SEE ATTACHED 4 DRAWINGS**

Printed on 07-14-2009, 1:49:02 PM by DAL

Page 6 of 6





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