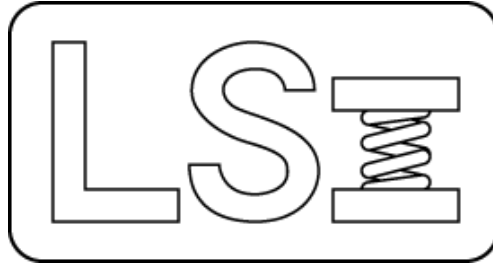


Larson Systems Inc.



V750 Parts List

050-0000-0109-02

Valve Spring Tester – 750 lb





050-0000-0109-02 A
V750 Digital Valve Spring Tester

Parts List

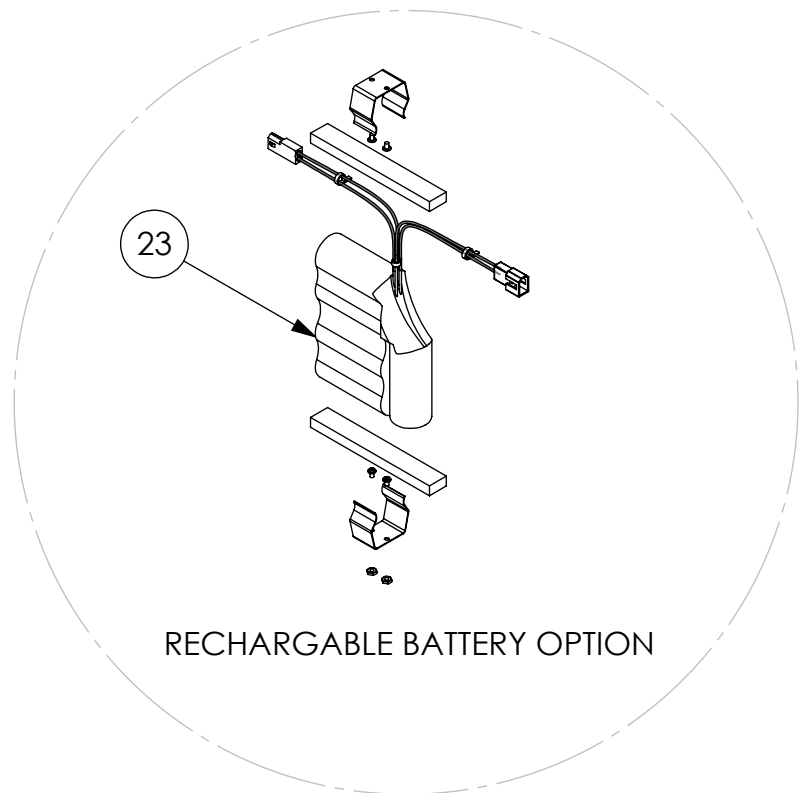
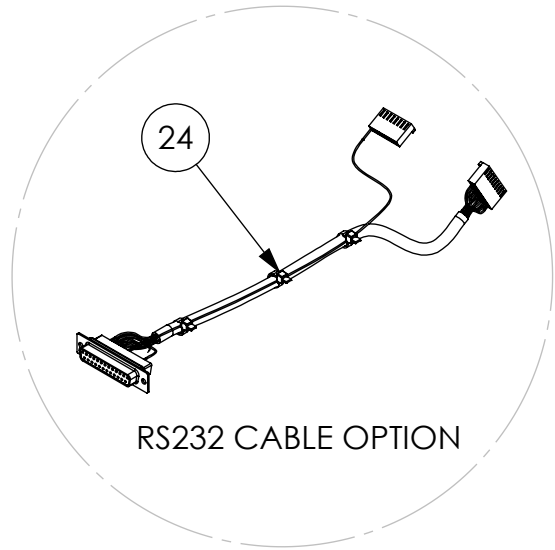
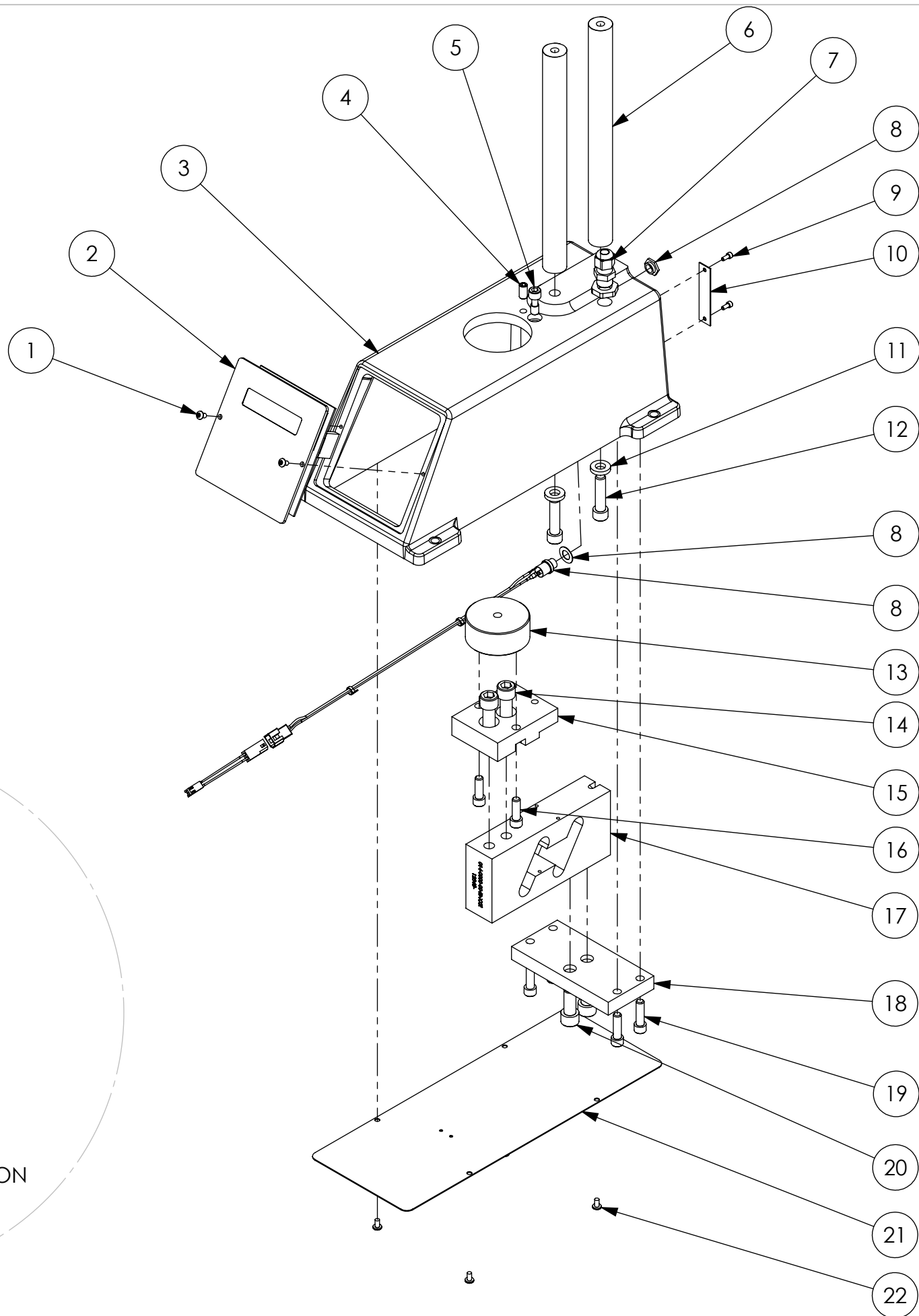
| Rev | By | Date | Description |
|-----|-----|------------|---|
| | BAH | 12-10-2009 | Software set up is std res DHT |
| A | TLS | 10-09-2013 | Removed 060-0000-0074-00 (was item 9, now obsolete) |
| | | | |
| | | | |

| Item | Qty | Part Number | Rev | Part Name | PCB Location | Part Length |
|------|-----|------------------|-----|---|--------------|-------------|
| 1 | 1 | 025-0000-0483-07 | D | Lower Assembly V750 lb | | in. |
| 2 | 1 | 025-0000-0185-05 | N | Upper Assembly 5" ECT / CDHT | | in. |
| 3 | 1 | 025-0000-0386-00 | F | Digital Length Display | | in. |
| 4 | 1 | 050-1000-0013-00 | | High Resolution Length for ECT (0.001" / 0.02 mm) | | in. |
| 5 | 1 | 050-1000-0012-00 | | High Resolution Force (2X Res. from 0-100% FS)(ECT) | | in. |
| 6 | 1 | 025-1000-0261-00 | D | Internal RS232 Cable | | in. |
| 7 | 1 | 025-1000-0396-00 | | Power Supply, 100-240 VAC 50-60 Hz (USA Plug) | | in. |
| 8 | 1 | 060-1000-0025-00 | K | User Manual - ECT / CDHT / FDHT / DHT / CST | | in. |
| 9 | 1 | 059-0000-0016-00 | E | Hand Tester Shipping Box & Materials | | in. |
| 10 | 1 | 060-2000-0018-02 | | Parts List - ECT 750 lb | | in. |
| 11 | 1 | 025-6000-0001-00 | | Sticker Assembly - ECT | | in. |

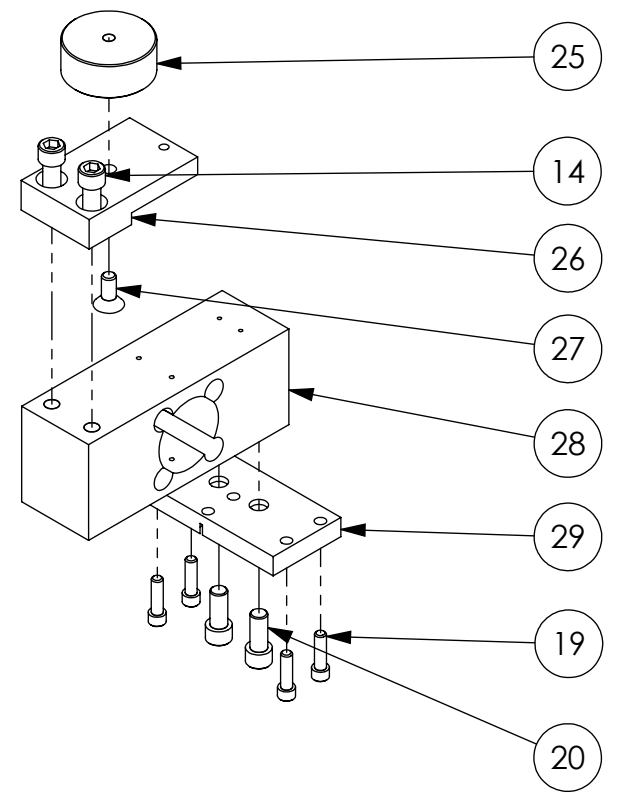
Approved by: _____

Date: _____

| Tester | Part Number |
|----------|------------------|
| ECT 750 | 025-0000-0483-01 |
| V1500 | 025-0000-0483-02 |
| ECT 500 | 025-1000-0483-05 |
| ECT 1000 | 025-0000-0483-06 |
| V 750 | 025-0000-0483-07 |



LOAD CELL OPTION 2



LARSON SYSTEMS INC.

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



025-0000-0483-07 D

Parts List

Lower Assembly V750 lb

| Rev | By | Date | Description |
|-----|-----|------------|---|
| A | SMH | 12-09-2002 | 2X 18-0-907-00 WAS 18-0-907-01, 18-0-2160 WAS 18-0-1301, 13-0-178 WAS 13-0-20, ADDED 13-3-22, DRAWING WAS 1 SHEET IS 2 SHEETS |
| B | BAH | 04-29-2010 | Chg front panel to -01 (was00)for use with Amcel load cell |
| C | RRS | 02-05-2013 | Add -04 thru -07, Created family drawing, renumbered |
| D | RRS | 07-26-2013 | Add -08 & -09 |

| Item | Qty | Part Number | Rev | Part Name | PCB Location | Part Length |
|------|-----|------------------|-----|--|--------------|-------------|
| 1 | 2 | 013-0000-0077-00 | | 6-32 X 1/4 BHCS | | in. |
| 2 | 1 | 025-0000-0482-00 | M | FP Assy, 2 Line Display (force/length)(6.9-15.8 mv | | in. |
| 3 | 1 | 018-0000-0871-02 | Y | DHT Base - Blue | | in. |
| 4 | 1 | 013-0000-0194-00 | | 1/4-28 X 1/2 SSS FLAT POINT | | in. |
| 5 | 1 | 018-0000-1302-00 | A | Compression Overload Stops | | in. |
| 6 | 2 | 018-0000-0907-00 | N | 8.200" Support Rods (5" Range) | | in. |
| 7 | 1 | 013-3000-0022-00 | | Nylon Liquid-Tight Cord Grip Fitting, Straight Dome, | | in. |
| 8 | 1 | 025-1000-0251-00 | G | Internal Power Cable (025-1000-0396-XX power | | in. |
| 9 | 2 | 013-0000-0178-00 | | 4-40 X 1/4 SHCS | | in. |
| 10 | 1 | 018-0000-2014-00 | | 25 PIN COVER PLATE | | in. |
| 11 | 2 | 018-0000-1514-00 | | WASHER .320 I.D. X .625 O.D. | | in. |
| 12 | 2 | 013-0000-0154-00 | | 5/16-18 X 1 1/4 SHCS | | in. |
| 13 | 1 | 018-0000-0905-02 | C | 2" DIA Lower Platform, -0048 series LC 500 lb, 1000 | | in. |
| 14 | 2 | 013-0000-0205-00 | | 3/8-24 X 7/8 SHCS | | in. |
| 15 | 1 | 018-0000-0903-04 | | Lower Platform Mounting Plate, -0048 series LC 500 lb, | | in. |
| 16 | 2 | 013-0000-0032-00 | | 1/4-20 X 3/4 SHCS | | in. |
| 17 | 1 | 014-0000-0048-03 | F | Load Cell - 750 lb / 340 kg | | in. |
| 17 | Opt | 014-0000-0048-01 | F | Load Cell - 1000 lb / 450 kg | | in. |
| 18 | 1 | 018-0000-0902-04 | | Load Cell Mounting Plate, -0048 Series LC 500 lb, 1000 | | in. |
| 19 | 4 | 013-0000-0149-00 | | 1/4-28 X 7/8" SHCS | | in. |
| 20 | 2 | 013-0000-0205-00 | | 3/8-24 X 7/8 SHCS | | in. |
| 21 | 1 | 018-0000-0877-00 | E | Base Bottom Cover | | in. |
| 22 | 4 | 013-0000-0195-00 | | 6-32 X 1/4 Phillips Pan Machine Screw | | in. |
| 23 | Opt | 025-1000-0654-00 | | Battery Pack, 6V | | in. |
| 24 | Opt | 025-1000-0287-01 | K | Internal RS 232 Cable | | in. |
| 25 | Opt | 018-0000-0905-00 | C | 2" DIA Lower Platform | | in. |
| 26 | Opt | 018-0000-0903-02 | C | Lower Platform Mounting Plate (DHT) | | in. |
| 27 | Opt | 013-0000-0053-00 | | 5/16-18 X 3/4 Flat Head Cap Screw | | in. |
| 28 | Opt | 025-1000-0172-03 | Q | 750 lb Load Cell Assembly | | in. |
| 29 | Opt | 018-0000-0902-02 | D | Load Cell Mounting Plate (DHT) | | in. |

Approved by: *Dal & Zam*Date: August 14, 2013**SEE ATTACHED 3 DRAWINGS**

Printed on 08-14-2013, 5:47:26 PM by DAL

Page 4 of 5



025-0000-0483-07 D

Parts List

Lower Assembly V750 lb

| Rev | By | Date | Description |
|-----|-----|------------|---|
| A | SMH | 12-09-2002 | 2X 18-0-907-00 WAS 18-0-907-01, 18-0-2160 WAS 18-0-1301, 13-0-178 WAS 13-0-20, ADDED 13-3-22, DRAWING WAS 1 SHEET IS 2 SHEETS |
| B | BAH | 04-29-2010 | Chg front panel to -01 (was00)for use with Amcel load cell |
| C | RRS | 02-05-2013 | Add -04 thru -07, Created family drawing, renumbered |
| D | RRS | 07-26-2013 | Add -08 & -09 |

| Item | Qty | Part Number | Rev | Part Name | PCB Location | Part Length |
|------|-----|------------------|-----|------------------------------------|--------------|-------------|
| 30 | ref | 060-4000-0235-00 | | Instructions, Hand tester assembly | | in. |

Approved by: 

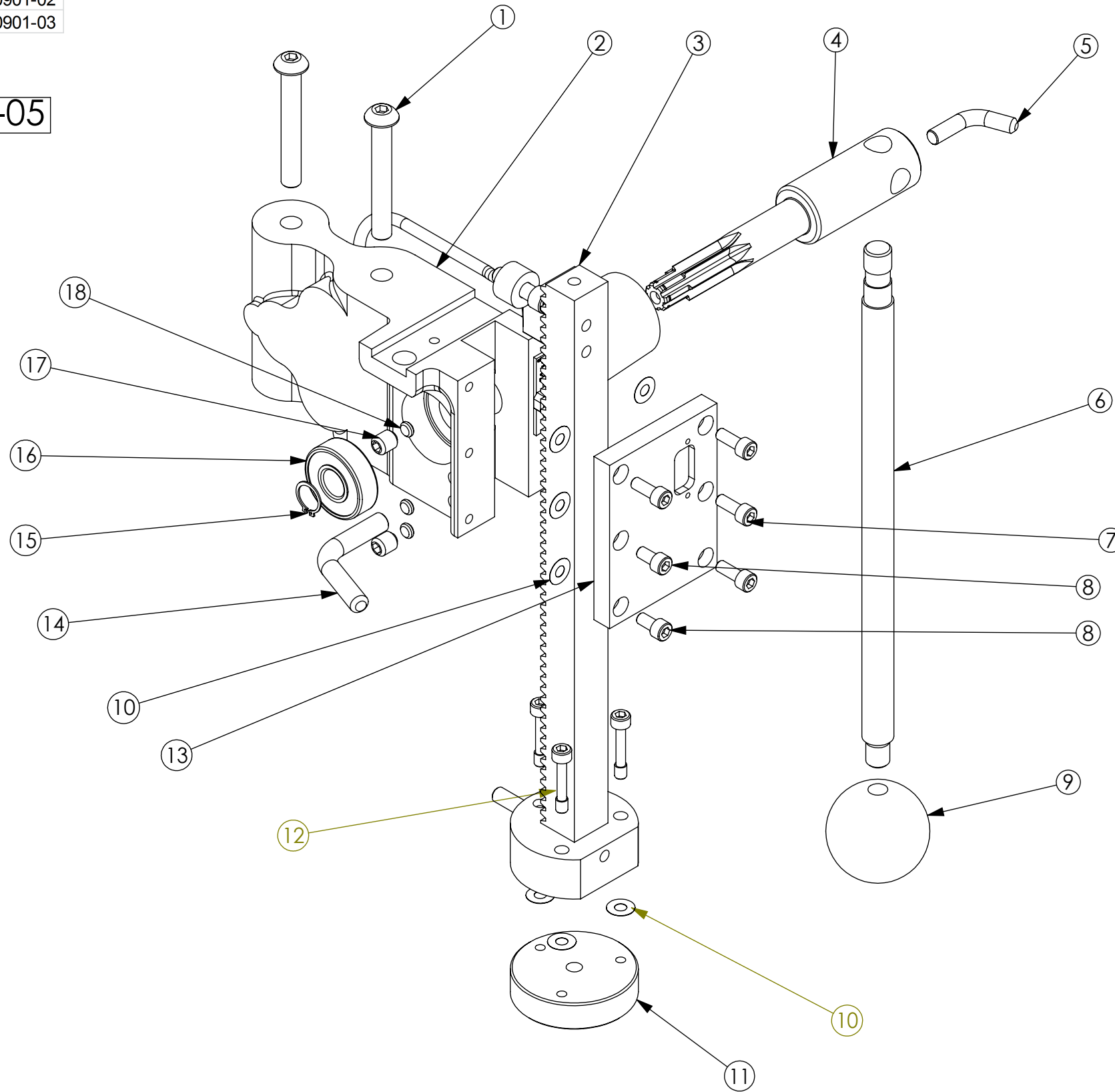
Date: August 14, 2013

SEE ATTACHED 3 DRAWINGS


| MODEL | ITEM 6 |
|---------------|------------------|
| 2 lbs, 11 lbs | 018-0000-0901-00 |
| 110 lbs | 018-0000-0901-01 |
| 750 lbs | 018-0000-0901-02 |
| 1500 lbs | 018-0000-0901-03 |

| REV. | DATE | DESCRIPTION | DRW | APPROVED |
|------|------|-------------|-----|----------|
| | | SEE SHEET 2 | | |

-05

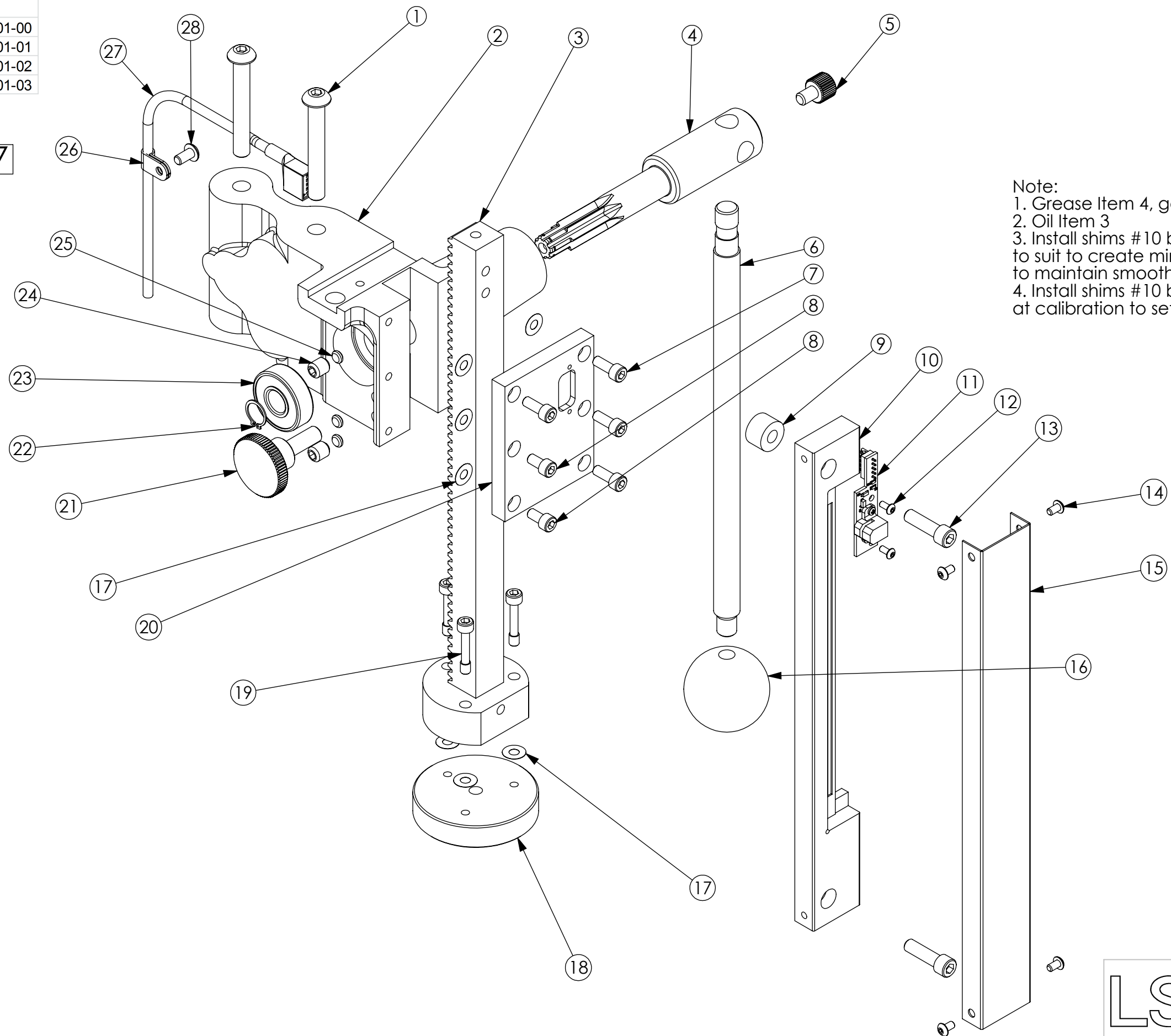


Note:
 1. Grease Item 4, gear teeth and 1.0 dia
 2. Oil Item 3
 3. Install shims #10 between #13 and #2 to suit to create min clearance for #3 but to maintain smooth operation
 4. Install shims #10 between #11 and #3 at calibration to set parallism of the platforms

| | | |
|---|----|--|
| 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 | - | |
| FINISH | - | APPROVALS DATE DRAWN SMH 11/22/00 APPR. |
| HEAT TREAT | -- | ECT/ CDHT Upper Assembly DWG. NO. B 025-0000-0185-05 & -07N SCALE: NONE SHEET 1 OF 4 |

| MODEL | ITEM 6 |
|---------------|------------------|
| 2 lbs, 11 lbs | 018-0000-0901-00 |
| 110 lbs | 018-0000-0901-01 |
| 750 lbs | 018-0000-0901-02 |
| 1500 lbs | 018-0000-0901-03 |

-07



Note:
 1. Grease Item 4, gear teeth and 1.0 dia
 2. Oil Item 3
 3. Install shims #10 between #13 and #2 to suit to create min clearance for #3 but to maintain smooth operation
 4. Install shims #10 between #11 and #3 at calibration to set parallism of the platforms



LARSON SYSTEMS INC.

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

B SCALE: NONE

DWG. NO. 025-0000-0185-05 -07 & -07N SHEET 2 OF 4



025-0000-0185-05 N
Upper Assembly 5" ECT / CDHT

Parts List

| Rev | By | Date | Description |
|-----|-----|------------|--|
| J | DAL | 03-31-2003 | Item #3, 018-0000-435-01,-03,-04 Was 018-0000-0435-XX |
| K | DAL | 06-16-2004 | Item 17 was 013-0000-0175-00 is 018-0000-1732-02, Item 12 was 013-0000-0242-00 is 013-0000-0243-00 |
| M | DAL | 01-22-2010 | Added #6 018-0000-0901-03 |
| N | RRS | 07-26-2013 | Add -07 |

| Item | Qty | Part Number | Rev | Part Name | PCB Location | Part Length |
|------|-----|------------------|-----|--|--------------|-------------|
| 1 | 2 | 013-0000-0300-00 | | 5/16-18 X 2 1/4 BHSCS | | in. |
| 2 | 1 | 018-0000-0872-03 | E | ECT / CDHT Rack Housing | | in. |
| 3 | 1 | 018-0000-1249-06 | P | ECT / CDHT / DHT Gear Rack | | in. |
| 4 | 1 | 018-0000-0876-00 | A | Stem Pinion | | in. |
| 5 | 1 | 018-0000-2214-00 | A | Handle Lock, 1/4-20 | | in. |
| 6 | 1 | 018-0000-0901-00 | C | Handle - 5.84" (2, 10 lb Hand Tester) | | in. |
| 6 | | 018-0000-0901-01 | C | Handle - 7.84" (22, 66, 110, 200 lb Hand Tester) | | in. |
| 6 | | 018-0000-0901-02 | C | Handle - 9.84" (750, 2000 lb Hand Tester) | | in. |
| 6 | | 018-0000-0901-03 | C | Handle - 11.84" (1500 lb Hand Tester) | | in. |
| 7 | 4 | 013-0000-0196-00 | | 10-32 X 1/2 SHCS | | in. |
| 8 | 2 | 013-0000-0192-00 | | 10-32 X 3/8 SHCS | | in. |
| 9 | 1 | 013-5000-0029-00 | | Phoenolic Ball Knob | | in. |
| 10 | AR | 018-0000-0435-01 | C | Shim - 0.195 ID, 0.450 OD, 0.0010 thick | | in. |
| 10 | AR | 018-0000-0435-03 | C | Shim - 0.195 ID, 0.450 OD, 0.0050 thick | | in. |
| 10 | AR | 018-0000-0435-04 | C | Shim - 0.195 ID, 0.450 OD, 0.0015 thick | | in. |
| 11 | 1 | 018-0000-1044-00 | C | 2" DIA Upper Platform | | in. |
| 12 | 3 | 018-0000-1732-02 | B | 10-32 Custom Screws for Platform Alignment | | in. |
| 13 | 1 | 018-0000-2218-00 | B | Front Plate (for LSI Encoder) | | in. |
| 14 | 1 | 018-0000-2221-00 | A | Rack Lock, 5/16-18 | | in. |
| 15 | 1 | 013-2000-0086-00 | | Snap Ring, 5100-46-PP | | in. |
| 16 | 1 | 013-2000-0080-00 | | Bearing, Hand Tester Housing | | in. |
| 17 | 2 | 013-0000-0243-00 | | 5/16-18 X 3/8 SSS with Nylon Lock | | in. |
| 18 | 3 | 018-0000-1036-00 | A | Brass Wear Pad | | in. |

Approved by: 

Date: August 12, 2013

SEE ATTACHED 2 DRAWINGS



025-0000-0185-07 N

Parts List

Upper Assembly 5" ECT / CDHT - Ø2.370 upper

| Rev | By | Date | Description |
|-----|-----|------------|--|
| J | DAL | 03-31-2003 | Item #3, 018-0000-435-01,-03,-04 Was 018-0000-0435-XX |
| K | DAL | 06-16-2004 | Item 17 was 013-0000-0175-00 is 018-0000-1732-02, Item 12 was 013-0000-0242-00 is 013-0000-0243-00 |
| M | DAL | 01-22-2010 | Added #6 018-0000-0901-03 |
| N | RRS | 07-26-2013 | Add -07 |

| Item | Qty | Part Number | Rev | Part Name | PCB Location | Part Length |
|------|-----|------------------|-----|--|--------------|-------------|
| 1 | 2 | 013-0000-0300-00 | | 5/16-18 X 2 1/4 BHSCS | | in. |
| 2 | 1 | 018-0000-0872-04 | E | ECT / CDHT Rack Housing - Carbide Black | | in. |
| 3 | 1 | 018-0000-1249-06 | P | ECT / CDHT / DHT Gear Rack | | in. |
| 4 | 1 | 018-0000-0876-00 | A | Stem Pinion | | in. |
| 5 | 1 | 018-0000-3531-00 | | Handle Lock Knob | | in. |
| 6 | 1 | 018-0000-0901-00 | C | Handle - 5.84" (2, 10 lb Hand Tester) | | in. |
| 6 | | 018-0000-0901-01 | C | Handle - 7.84" (22, 66, 110, 200 lb Hand Tester) | | in. |
| 6 | | 018-0000-0901-02 | C | Handle - 9.84" (750, 2000 lb Hand Tester) | | in. |
| 6 | | 018-0000-0901-03 | C | Handle - 11.84" (1500 lb Hand Tester) | | in. |
| 7 | 4 | 013-0000-0196-00 | | 10-32 X 1/2 SHCS | | in. |
| 8 | 2 | 013-0000-0192-00 | | 10-32 X 3/8 SHCS | | in. |
| 9 | 1 | 018-0000-2222-00 | | ENCODER SPACER | | in. |
| 10 | 1 | 025-0000-0484-00 | B | Glass Scale Assembly | | in. |
| 11 | 1 | 025-1000-0351-00 | A | Encoder PCB Assembly | | in. |
| 12 | 2 | 013-0000-0020-00 | | 4-40 X 1/4 BHCS | | in. |
| 13 | 2 | 013-0000-0202-00 | | 1/4-20 X 7/8 SHCS | | in. |
| 14 | 4 | 013-0000-0077-00 | | 6-32 X 1/4 BHCS | | in. |
| 15 | 1 | 018-0000-2217-00 | B | Encoder Cover | | in. |
| 16 | 1 | 013-5000-0029-00 | | Phoenolic Ball Knob | | in. |
| 17 | AR | 018-0000-0435-01 | C | Shim - 0.195 ID, 0.450 OD, 0.0010 thick | | in. |
| 17 | AR | 018-0000-0435-03 | C | Shim - 0.195 ID, 0.450 OD, 0.0050 thick | | in. |
| 17 | AR | 018-0000-0435-04 | C | Shim - 0.195 ID, 0.450 OD, 0.0015 thick | | in. |
| 18 | 1 | 018-0000-1044-02 | | Ø2.375 Upper Platform | | in. |
| 19 | 3 | 018-0000-1732-02 | B | 10-32 Custom Screws for Platform Alignment | | in. |
| 20 | 1 | 018-0000-2218-00 | B | Front Plate (for LSI Encoder) | | in. |
| 21 | 1 | 018-0000-3532-00 | | Ram Lock Knob | | in. |
| 22 | 1 | 013-2000-0086-00 | | Snap Ring, 5100-46-PP | | in. |
| 23 | 1 | 013-2000-0080-00 | | Bearing, Hand Tester Housing | | in. |
| 24 | 2 | 013-0000-0243-00 | | 5/16-18 X 3/8 SSS with Nylon Lock | | in. |
| 25 | 3 | 018-0000-1036-00 | A | Brass Wear Pad | | in. |

Approved by: David Zamora

Date: August 12, 2013

SEE ATTACHED 2 DRAWINGS



025-0000-0185-07 N

Parts List

Upper Assembly 5" ECT / CDHT - Ø2.370 upper

| Rev | By | Date | Description |
|-----|-----|------------|--|
| J | DAL | 03-31-2003 | Item #3, 018-0000-435-01,-03,-04 Was 018-0000-0435-XX |
| K | DAL | 06-16-2004 | Item 17 was 013-0000-0175-00 is 018-0000-1732-02, Item 12 was 013-0000-0242-00 is 013-0000-0243-00 |
| M | DAL | 01-22-2010 | Added #6 018-0000-0901-03 |
| N | RRS | 07-26-2013 | Add -07 |

| Item | Qty | Part Number | Rev | Part Name | PCB Location | Part Length |
|------|-----|------------------|-----|-----------------------------------|--------------|-------------|
| 26 | 1 | 013-3000-0023-00 | | Cable Clamp, 3/16" Dia. | | in. |
| 27 | 1 | 025-1000-0352-00 | B | Encoder Cable Standard ECT / CDHT | | in. |
| 28 | 1 | 013-0000-0052-00 | | 10-32 X 3/8 BHSCS | | in. |

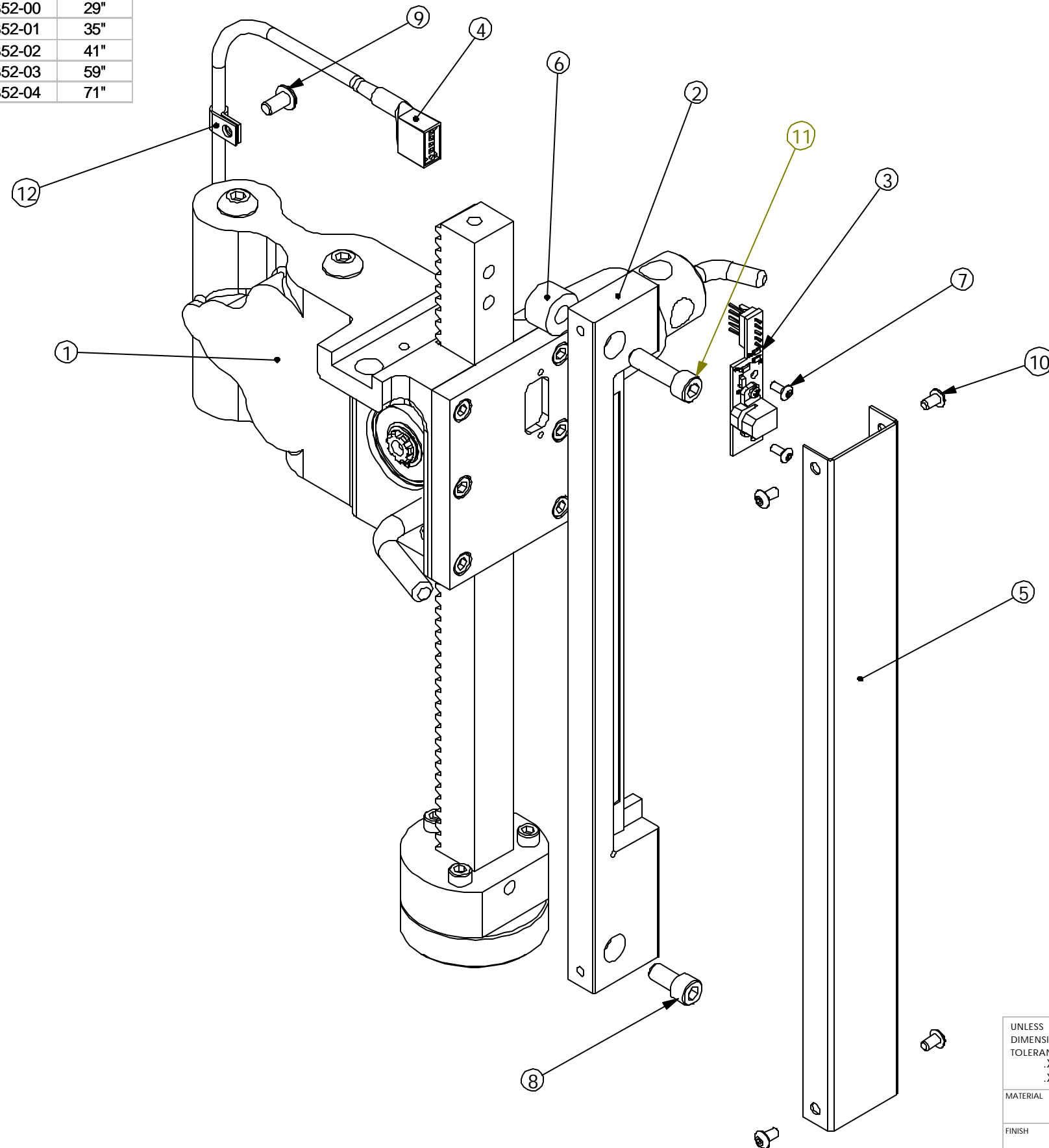
Approved by: 

Date: August 12, 2013

SEE ATTACHED 2 DRAWINGS

| MODEL | 025-1000-352-XX | LENGTH |
|--------------------|-----------------|--------|
| STANDARD ECT/ CDHT | 025-1000-352-00 | 29" |
| STANDARD DHT | 025-1000-352-01 | 35" |
| DHT, 18" RODS | 025-1000-352-02 | 41" |
| DHT, 36" RODS | 025-1000-352-03 | 59" |
| DHT, 48" RODS | 025-1000-352-04 | 71" |

| REV. | DATE | DESCRIPTION | DRW | APPROVED |
|------|------|-------------|-----|----------|
| | | See Page 2 | | |



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

| | |
|------------|----|
| MATERIAL | 1 |
| FINISH | 1 |
| HEAT TREAT | -- |



| | |
|-----------|---------|
| APPROVALS | DATE |
| DRAWN SMH | 12/9/00 |
| APPR. | |
| APPR. | |

LARSON SYSTEMS INC.

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

Upper Assembly with Encoder

B DWG. NO. 025-0000-0386-00F

SCALE: NONE SHEET 1 OF 2



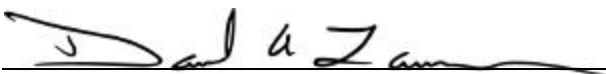
025-0000-0386-00 F
Digital Length Display

Parts List

| Rev | By | Date | Description |
|-----|-----|------------|--|
| C | SMH | 09-07-2001 | Removed Digital Scale and replaced with LSI 6" encoder, reformatted assembly, removed notes and chart, assembly is now for both the ECT and CDHT |
| D | SMH | 10-30-2002 | Added table for 25-1000-0352-XX |
| E | SMH | 12-24-2002 | Standard ECT/CDHT was listed as standard ECT/DHT on the table |
| F | DAL | 06-17-2004 | 013-3000-0023-00 was 013-3000-0021-00 |

| Item | Qty | Part Number | Rev | Part Name | PCB Location | Part Length |
|------|-----|------------------|-----|-----------------------------------|--------------|-------------|
| 1 | 1 | 025-0000-0185-05 | K | Upper Assembly 5" ECT / CDHT | | in. |
| 2 | 1 | 025-0000-0484-00 | A | Glass Scale Assembly | | in. |
| 3 | 1 | 025-1000-0351-00 | | Encoder PCB Assembly | | in. |
| 4 | 1 | 025-1000-0352-00 | B | Encoder Cable Standard ECT / CDHT | | in. |
| 4 | | 025-1000-0352-01 | B | Encoder Cable Standard DHT | | in. |
| 4 | | 025-1000-0352-02 | B | Encoder Cable DHT, 18" Rods | | in. |
| 4 | | 025-1000-0352-03 | B | Encoder Cable DHT, 36" Rods | | in. |
| 4 | | 025-1000-0352-04 | B | Encoder Cable DHT, 48" Rods | | in. |
| 5 | 1 | 018-0000-2217-00 | A | Encoder Cover | | in. |
| 6 | 1 | 018-0000-2222-00 | | ENCODER SPACER | | in. |
| 7 | 2 | 013-0000-0020-00 | | 4-40 X 1/4 Button Head Cap Screw | | in. |
| 8 | 1 | 013-0000-0031-00 | | 1/4-20 X 1/2 SHCS | | in. |
| 9 | 1 | 013-0000-0052-00 | | 10-32 X 3/8 BHSCS | | in. |
| 10 | 4 | 013-0000-0077-00 | | 6-32 X 1/4 Button Head Cap Screw | | in. |
| 11 | 1 | 013-0000-0202-00 | | 1/4-20 X 7/8 SHCS | | in. |
| 12 | 1 | 013-3000-0023-00 | | Cable Clamp, 3/16" Dia. | | in. |

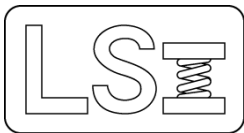
Approved by:



Date:

June 17, 2004

SEE ATTACHED DRAWING



Larson Systems Inc.
10073 Baltimore Street NE
Minneapolis, MN 55449-4425
www.larsonsystems.com

763-780-2131
1-877-780-2131
Fax: 763-780-2182
info@larsonsystems.com

