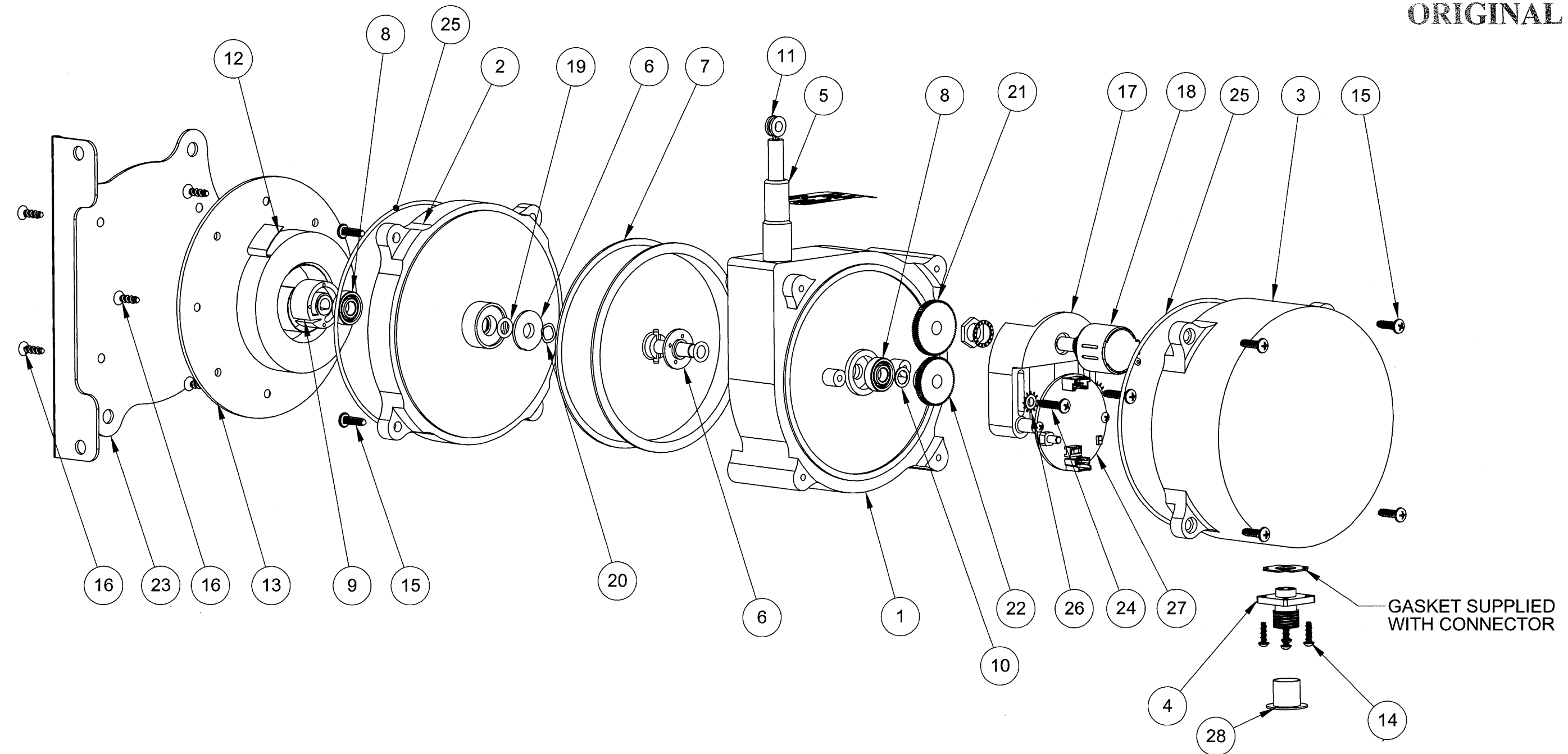


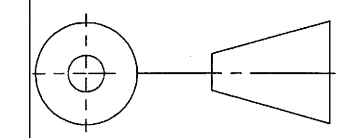
| REVISIONS | | | |
|-----------|---------------|-----------|-----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| F | SEE DCN: 8041 | 3/31/2011 | <i>ND</i> |

ORIGINAL



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THIRD ANGLE PROJECTION



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Tel: (818) 701-2750 Fax: (818) 701-2799
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TITLE
**ASSEMBLY DRAWING
SR1 SERIES**

| | | | | | | |
|----------------------|------------|----------|------------|----------------|---------------|----------|
| APPROVALS | | DATE | SIZE | CODE IDENT. NO | DWG. NO. | REV |
| DRAWN | M.KRATOFIL | 08/05/08 | B | 52158 | PS-144 | F |
| CHKD | <i>WSX</i> | 3/31/11 | SCALE: 1:2 | | SHEET 1 OF 8 | |
| DO NOT SCALE DRAWING | | | | | | |

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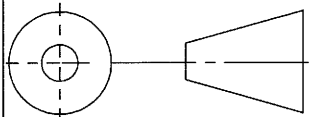
| | | | |
|----------|--------------|---|------|
| 28 | 9650643-0000 | CAP,PLASTIC,M12 CONNECTOR | 1 |
| 27 | SEE TABLE 1 | OPTIONAL ELECTRONICS | 1 |
| 26 | 9650444-0270 | WASHER,LOCK PER 650720 | 2 |
| 25 | 9000312-0463 | SEAL,O'RING,NITRILE,4.171 ID | 2 |
| 24 | 9650444-0269 | SCREW,SELF-TAP,#6,PER 650675 | 2 |
| 23 | 9679813-0000 | BRACKET,MOUNTING,SR1 | 1 |
| 22 | 9678770-0070 | GEAR,DELFIN,80PITCH,70TOOTH, ϕ .25 | 1 |
| 21 | 9678770-0080 | GEAR,DELFIN,80 PITCH,80 TOOTH, ϕ .25 | 1 |
| 20 | 9000400-0142 | WASHER,WAVE,PER 650634 | 1 |
| 19 | 9000312-0102 | SEAL,O'RING,NITRILE,0.239 ID | 2 |
| 18 | SEE TABLE 1 | POT, PER TABLE 1 | 1 |
| 17 | 9670089-0000 | BRACKET,POTENTIOMETER,SR1A | 1 |
| 16 | 9650444-0250 | SCREW,SELF-TAP,#6,PER 650675 | 8 |
| 15 | 9650444-0272 | SCREW,SELF-TAP,#6,PER 650675 | 8 |
| 14 | 9650444-0248 | MSCR,4-24 X 3/8 LG,SELF TAPPING PAN HEAD | 4 |
| 13 | 9679602-0000 | SPRING COVER,SR1A | 1 |
| 12 | 9679597-0000 | SPRING,POWER,SR1A | 1 |
| 11 | SEE TABLE 1 | KIT,CABLE,0.034 PER 604176 | 1 |
| 10 | 9000400-0057 | WASHER,SHIM,PER DWG 650482 | 1 |
| 9 | 9679593-0000 | ARBOR,SPRING,SR1A | 1 |
| 8 | 9000410-0015 | BEARING .250 X .625 PER 650627 | 2 |
| 7 | 9604174-0000 | SUB-ASSY,SPOOL/SHAFT, SR1A | 1 |
| 6 | 9679598-0000 | CAP,O-RING GROOVE,SR1A | 2 |
| 5 | 9679710-0000 | CABLE GUIDE, NYLON RFL, SR1A | 1 |
| 4 | 9035701-0029 | CONN,4 PIN,M12 MICRO,FLANGE MOUNT | 1 |
| 3 | 9679601-0000 | COVER,POTENTIOMETER,SR1A | 1 |
| 2 | 9670100-0000 | HOUSING,SPRING,SR1A | 1 |
| 1 | 9670090-0000 | HOUSING,SPOOL,SR1A | 1 |
| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |

| MODEL NUMBER | POTENTIOMETER | CABLE ASSEMBLY | PCB |
|--------------|---------------|----------------|--------------|
| SR1A-62 | 9085000-0030 | 9604176-0062 | N / A |
| SR1A-125 | 9085000-0033 | 9604176-0125 | N / A |
| SR1V-125 | 9085000-0033 | 9604176-0125 | 9604113-0001 |
| SR1M-125 | 9085000-0033 | 9604176-0125 | 9604157-0001 |
| SR1S-125 | 9085000-0033 | 9604176-0125 | 9604196-0001 |
| SR1E-125 | N / A | 9604176-0125 | N / A |

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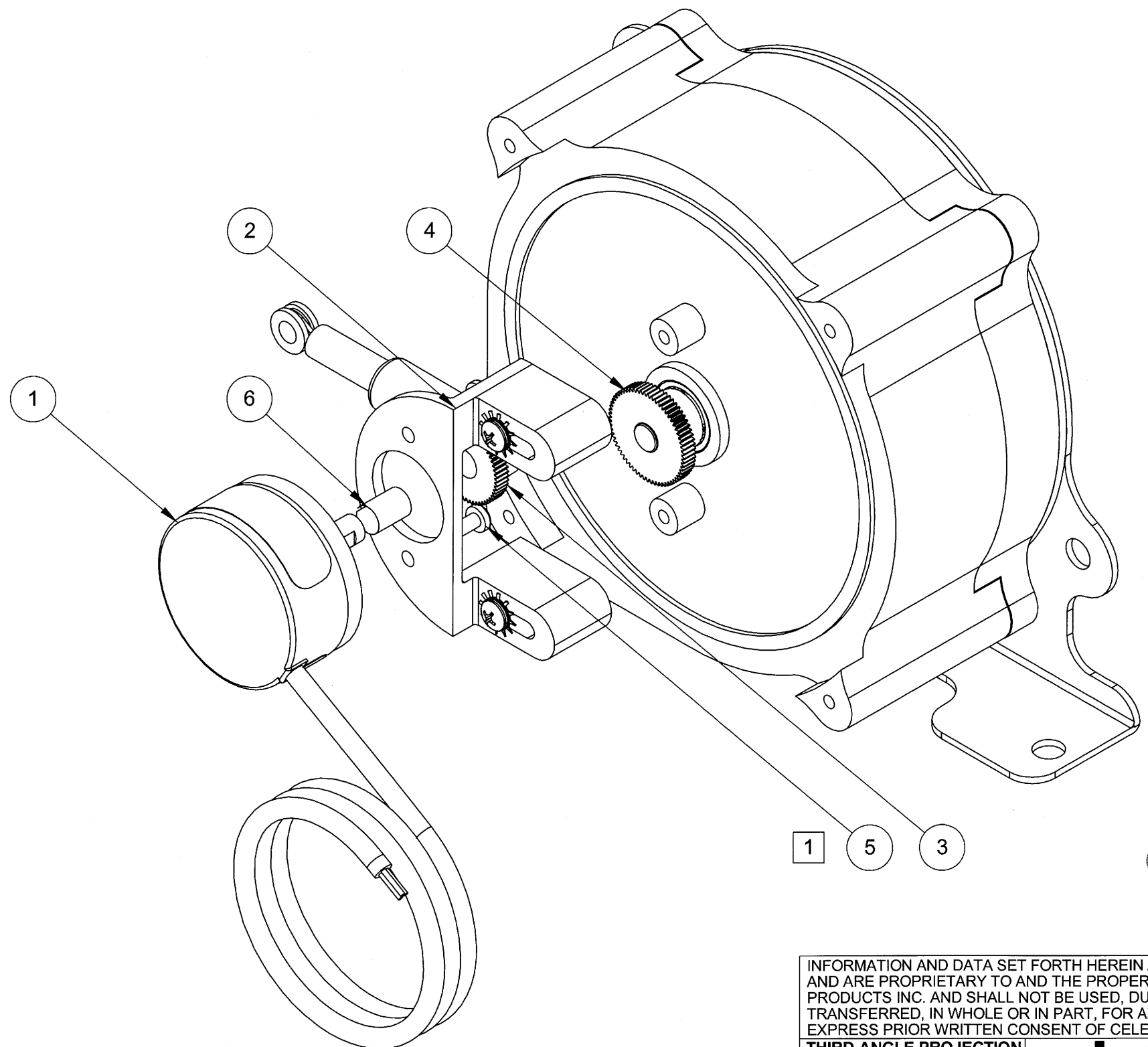
Transducer Products Inc.

TITLE
**ASSEMBLY DRAWING
SR1 SERIES**

| | | | | | |
|------------------|----------|----------------------|----------------|------------|--------------|
| APPROVALS | DATE | SIZE | CODE IDENT. NO | DWG. NO. | REV |
| DRAWN M.KRATOFIL | 08/05/08 | B | 52158 | PS-144 | F |
| CHKD MSK | 3/31/11 | DO NOT SCALE DRAWING | | SCALE: 1:2 | SHEET 2 OF 8 |

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SR1E-125 ASSEMBLY



1 5 3

ORIGINAL

1 USE LOCTITE PRIMER 7649, ALLOW TO DRY, THEN USE LOCTITE 222, 2 PLACES.

G

| | | | |
|----------|--------------|------------------------------------|------|
| 6 | 9650496-0000 | ADAPTER,6MM-.25 DIA SHAFT | 1 |
| 5 | 9650444-0013 | MSCR,CRES,M3 X 6MM XRSPNH | 2 |
| 4 | 9678770-0065 | GEAR,DELFIN,80PITCH,65 TEETH,φ .25 | 1 |
| 3 | 9678770-0055 | GEAR,DELFIN,80 P,55 TEETH,φ .25 | 1 |
| 2 | 9679944-0000 | BRACKET,ENCODER,SR1 | 1 |
| 1 | 9650648-1000 | ENCDR,1000/REV,CMOS/TTL | 1 |
| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |

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ASSEMBLY DRAWING SR1 SERIES

| | | | | | |
|----------------------|------|------------|----------------|--------------|-----|
| APPROVALS | DATE | SIZE | CODE IDENT. NO | DWG. NO. | REV |
| | | B | 52158 | PS-144 | F |
| DO NOT SCALE DRAWING | | SCALE: 1:1 | | SHEET 3 OF 8 | |

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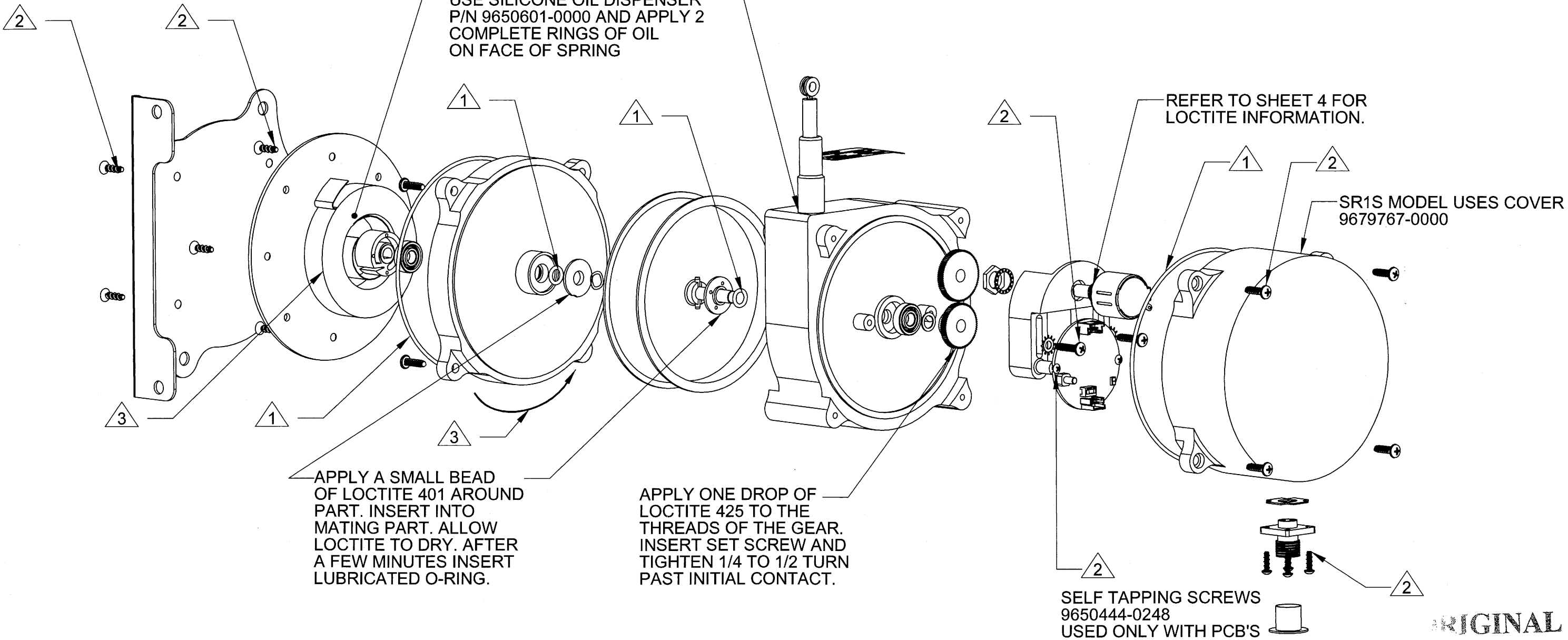
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3 SPRING TURNS: AFTER CABLE HAS BEEN FULLY WOUND ONTO TO THE SPOOL, ROTATE THE SPRING HOUSING, IN THE DIRECTION SHOWN, $4 \pm 1/4$ TURN.

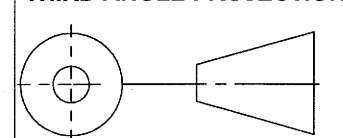
2 DO NOT USE LOCTITE ON SELF-TAPPING SCREWS (ITEMS 15, 16, AND 17).

1 O-RINGS TO BE COMPLETELY COATED USING PARKER O-RING LUBRICANT, P/N 9000000-0002.

NOTES: unless otherwise specified

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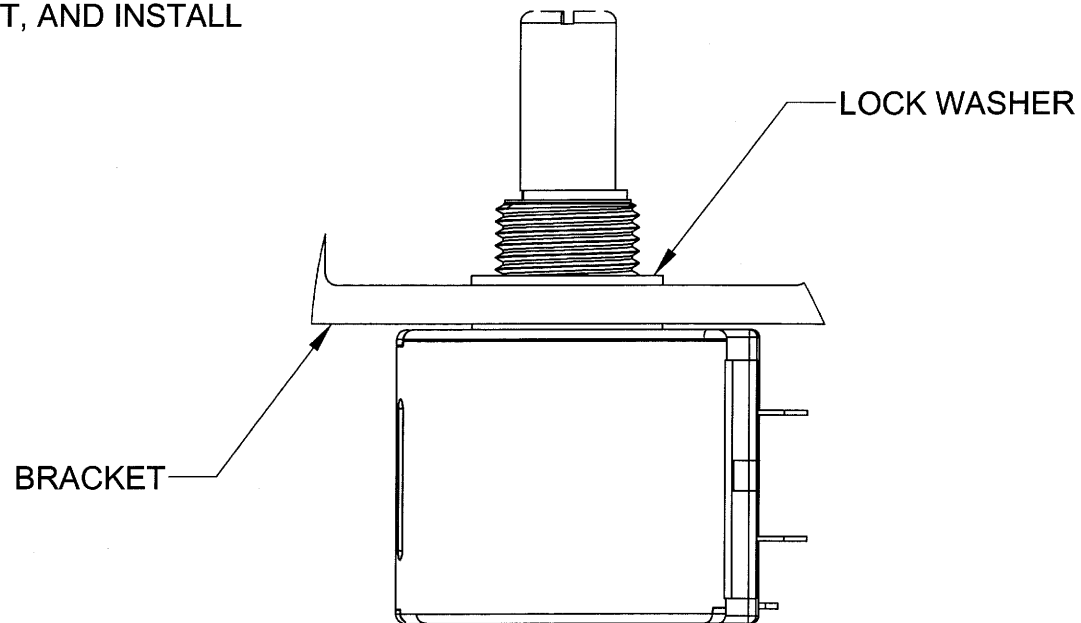
TITLE
**ASSEMBLY DRAWING
SR1 SERIES**

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|-----------|------------|----------|--|----------------------|----------------|---------------|--------------|
| APPROVALS | | DATE | | SIZE | CODE IDENT. NO | DWG. NO. | REV |
| DRAWN | M.KRATOFIL | 08/05/08 | | B | 52158 | PS-144 | F |
| CHKD | <i>MSK</i> | 3/21/11 | | DO NOT SCALE DRAWING | | SCALE: 1:2 | SHEET 4 OF 8 |

A

1. INSERT POT THROUGH HOLE IN BRACKET, AND INSTALL WASHER AGAINST BRACKET.

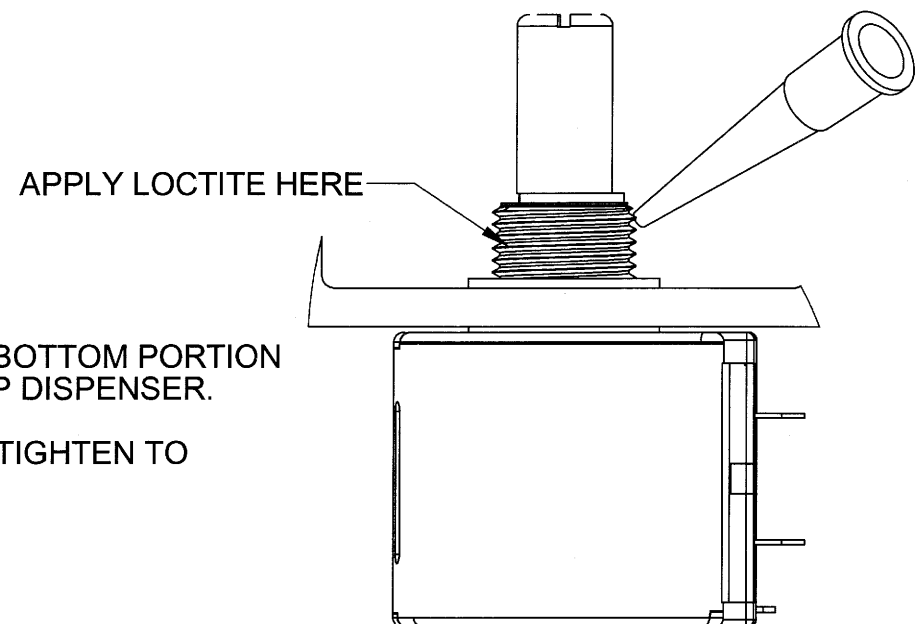
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C

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E



2. APPLY 1 DROP OF LOCTITE 425 TO THE BOTTOM PORTION OF THREADS SHOWN, USING A BLUE TIP DISPENSER.
3. ATTACH NUT TO THREADS OF POT AND TIGHTEN TO 20-25 IN-LBS OF TORQUE.

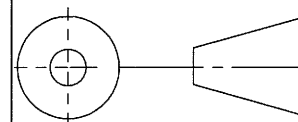
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ORIGINAL

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TITLE
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| | | | | | | | |
|----------------------|------------|----------|--|------------|----------------|---------------|----------|
| APPROVALS | | DATE | | SIZE | CODE IDENT. NO | DWG. NO. | REV |
| DRAWN | M.KRATOFIL | 08/05/08 | | B | 52158 | PS-144 | F |
| CHKD | <i>MSK</i> | 3/31/11 | | SCALE: 2:1 | | SHEET 5 OF 8 | |
| DO NOT SCALE DRAWING | | | | | | | |

A

| SR1A | | | |
|------------------------|--------------|--------------|--------------|
| POTENTIOMETER TERMINAL | CW(3) | CCW(1) | S(2) |
| WIRE COLOR | BLACK | WHITE | GREEN |
| 4-PIN M12 CONNECTOR | PIN 1 | PIN 2 | PIN 3 |
| FUNCTION | + INPUT | COMMON | OUTPUT |

B

| SR1M | | | |
|------------------------|---------------------|---------------|----------------|
| 4-PIN HARNESS 604066 | | | |
| WIRE COLOR | WHITE | GREEN | BLACK |
| 4-PIN M12 CONNECTOR | 1 | 2 | 3 |
| FUNCTION | + INPUT (10-40 vdc) | NO CONNECTION | OUTPUT(4-20MA) |
| 3-PIN HARNESS 604019 | | | |
| WIRE COLOR | BLACK | GREEN | WHITE |
| POTENTIOMETER TERMINAL | CCW (1) | S (2) | CW (3) |

C

| SR1V | | | |
|------------------------|--------------|--------------|--------------|
| 4-PIN HARNESS 604066 | | | |
| WIRE COLOR | WHITE | GREEN | BLACK |
| 4-PIN M12 CONNECTOR | 1 | 2 | 3 |
| FUNCTION | + INPUT | + OUTPUT | COMMON |
| 3-PIN HARNESS 604019 | | | |
| WIRE COLOR | BLACK | GREEN | WHITE |
| POTENTIOMETER TERMINAL | CCW (1) | S (2) | CW (3) |

D

E

| SR1S | | | | | | |
|------------------------|--------------|--------------|--------------|-------|-------|--------|
| 6-PIN HARNESS 604226 | | | | | | |
| 8-PIN M12 CONNECTOR | 1 | 2 | 3 | 4 | 5 | 6 |
| FUNCTION | V+ | GND | DATA | DATA' | CLOCK | CLOCK' |
| 3-PIN HARNESS 604019 | | | | | | |
| WIRE COLOR | BLACK | GREEN | WHITE | | | |
| POTENTIOMETER TERMINAL | CCW (1) | S (2) | CW (3) | | | |

ORIGINAL

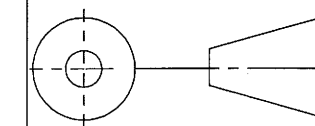
F

| SR1E | | | | |
|---------------------|------------|--------------|--------------|--------------|
| ENCODER WIRE COLOR | RED | BLACK | GREEN | WHITE |
| 4-PIN M12 CONNECTOR | PIN 1 | PIN 2 | PIN 3 | PIN 4 |
| FUNCTION | + INPUT | COMMON | CHANNEL A | CHANNEL B |

G

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THIRD ANGLE PROJECTION

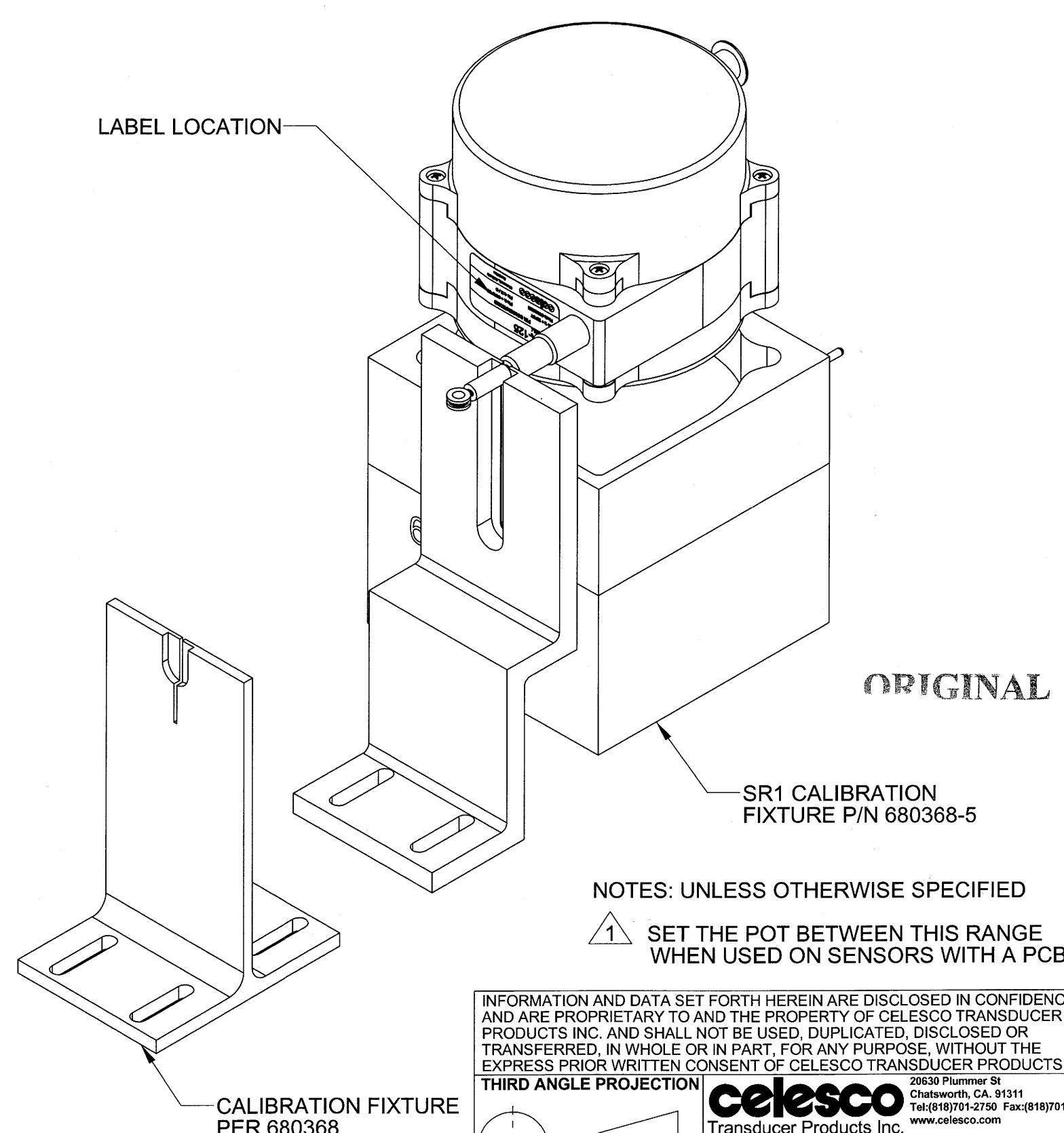


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TITLE
**ASSEMBLY DRAWING
 SR1 SERIES**

| | | | | | |
|------------------|----------------|----------------------|----------------|---------------|--------------|
| APPROVALS | DATE | SIZE | CODE IDENT. NO | DWG. NO. | REV |
| DRAWN M.KRATOFIL | 08/05/08 | B | 52158 | PS-144 | F |
| CHKD <i>MSK</i> | <i>3/21/11</i> | DO NOT SCALE DRAWING | | SCALE: 1:2 | SHEET 6 OF 8 |

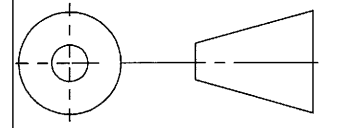
| TABLE 2 ACCEPTANCE TEST CRITERIA SR1A SERIES | | |
|--|----------------------|-------------------------------|
| USE CALIBRATION FIXTURES P/N: 680368 & 680420 FOR CALIBRATION | | |
| CABLE POSITION % F.S. | ACCEPTABLE OUTPUT | |
| | SR1-62 | SR1A-125 |
| 0% | 0.050 - 0.150 VDC | 0.050 - 0.150 VDC \triangle |
| 50% | 5.580 - 5.680 VDC | 4.720 - 4.810 VDC |
| 100% | 9.440 - 9.610 VDC | 9.440 - 9.610 VDC |
| TABLE 3 ACCEPTANCE TEST CRITERIA SR1 V SERIES | | |
| USE CALIBRATION FIXTURES P/N: 680368 & 680420 FOR CALIBRATION | | |
| CABLE POSITION %F.S. | ACCEPTABLE OUTPUT | |
| 0% | -.02 - .150 VDC | |
| 50% | 4.960 - 5.040 VDC | |
| 100% | 9.985 - 10.015 VDC | |
| TABLE 4 ACCEPTANCE TEST CRITERIA SR1M SERIES | | |
| USE CALIBRATION FIXTURES P/N 680368 AND 680420 FOR CALIBRATION | | |
| CABLE POSITION %F.S. | ACCEPTABLE OUTPUT | |
| 0% | 3.980 - 4.020 mA | |
| 50% | 11.936 - 12.064 mA | |
| 100% | 19.980 - 20.020 mA | |
| TABLE 5 ACCEPTANCE TEST CRITERIA SR1S SERIES | | |
| USE CALIBRATION FIXTURES P/N 680368 AND 680420 FOR CALIBRATION USE METER: | | |
| CABLE POSITION %F.S. | ACCEPTABLE OUTPUT | |
| 0% | 0 - 0 COUNTS | |
| 50% | 6188 - 6438 COUNTS | |
| 100% | 12375 - 12875 COUNTS | |
| TABLE 6 ACCEPTANCE TEST CRITERIA SR1E SERIES | | |
| USE CALIBRATION FIXTURES P/N 680368 AND 680420 FOR CALIBRATION | | |
| CABLE POSITION %F.S. | ACCEPTABLE OUTPUT | |
| 0% | 0 - 0 COUNTS | |
| 50% | 6188 - 6438 COUNTS | |
| 100% | 12375 - 12875 COUNTS | |



NOTES: UNLESS OTHERWISE SPECIFIED
 \triangle 1 SET THE POT BETWEEN THIS RANGE WHEN USED ON SENSORS WITH A PCB.

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TITLE
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 SR1 SERIES**

APPROVALS DATE

DRAWN M.KRATOFIL 08/05/08

CHKD WSK 7/31/11

DO NOT SCALE DRAWING

SIZE CODE IDENT. NO DWG. NO REV

B 52158 PS-144 F

SCALE: 1:2 SHEET 7 OF 8

