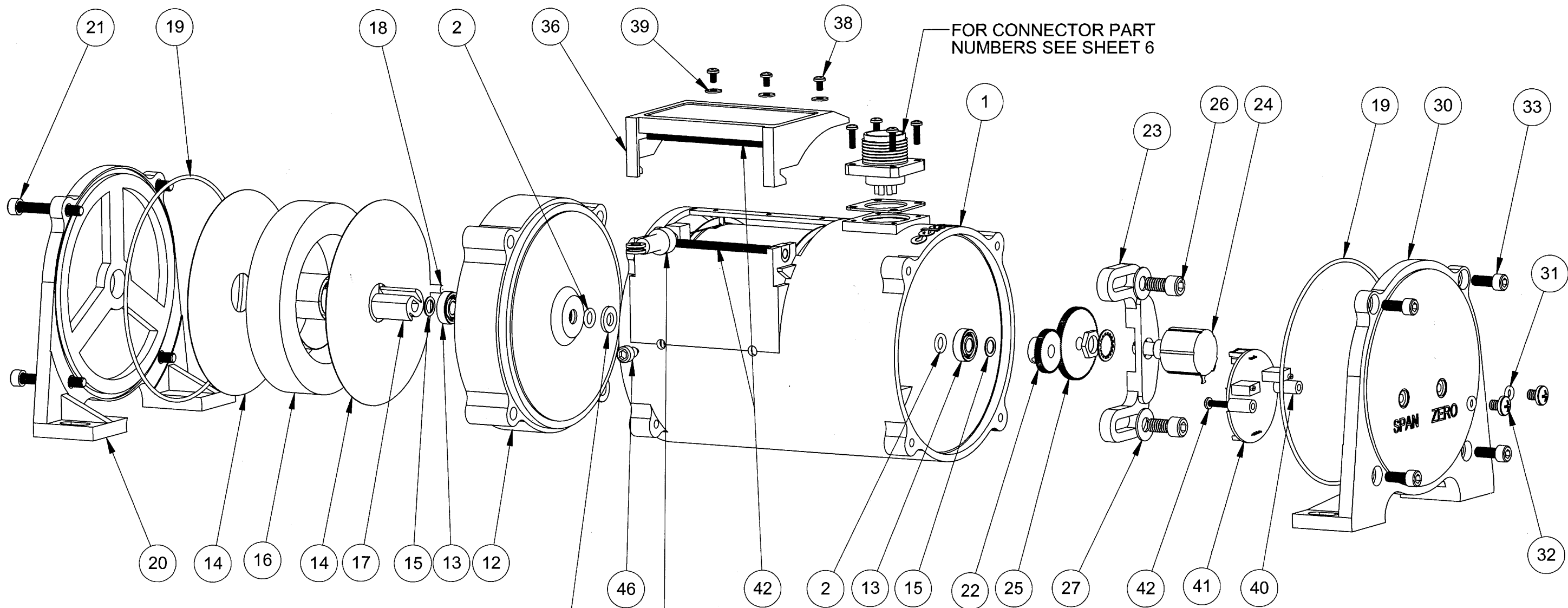


REVISIONS

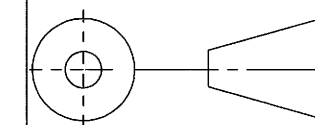
REV.	DESCRIPTION	DATE	APPROVED
K	SEE DCN: 8145	05/25/2011	MSK



ORIGINAL

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THIRD ANGLE PROJECTION



**celesco** 20630 Plummer St  
Chatsworth, CA. 91311  
Tel: (818) 701-2750 Fax: (818) 701-2799  
www.celesco.com

TITLE  
**PT9000 ASSEMBLY DRAWING  
75 THRU 550 INCH ALUMINUM**

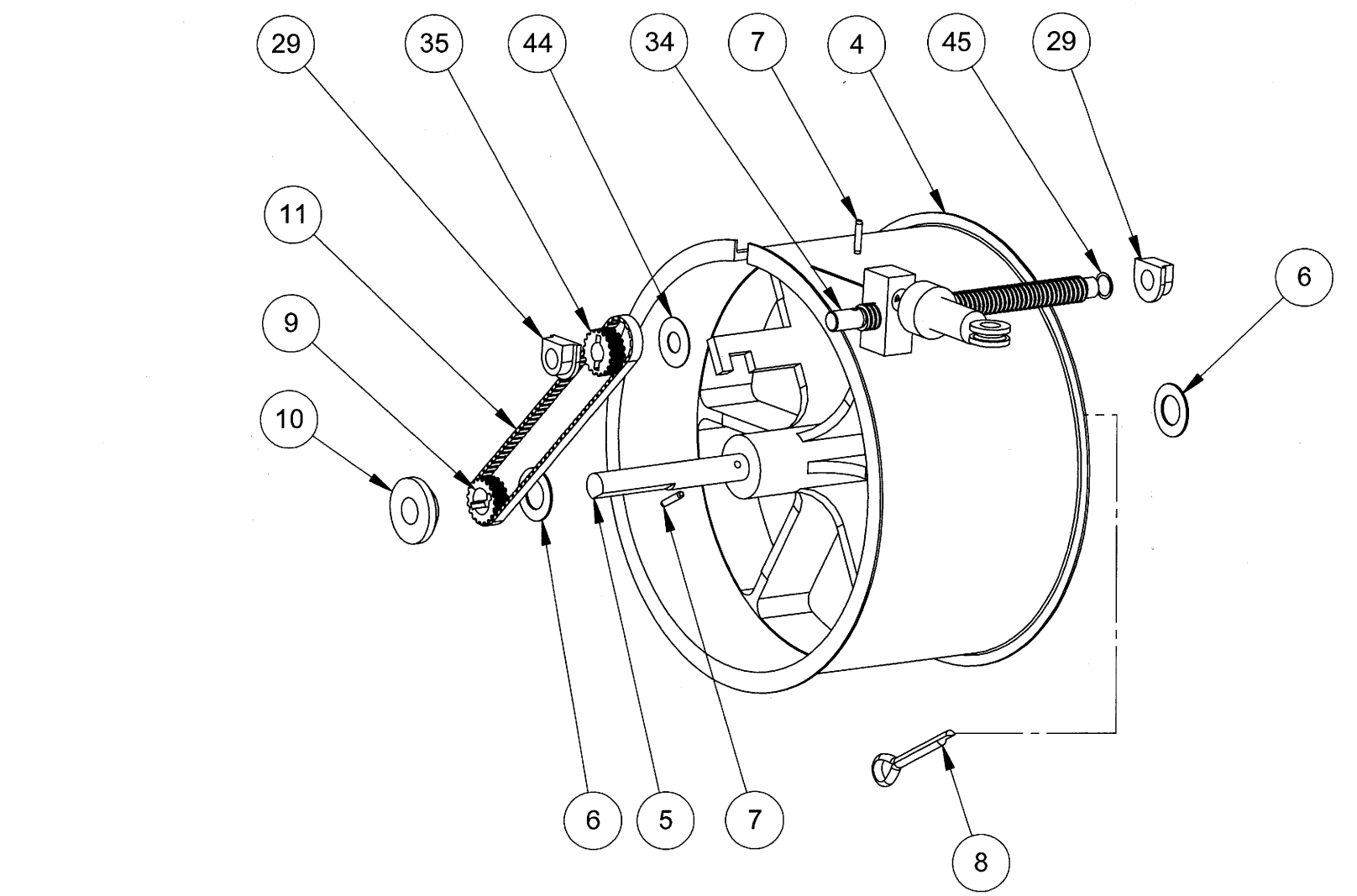
APPROVALS	DATE
DRAWN M.KRATOFIL	08/31/06
CHKD <i>[Signature]</i>	5/25/11

SIZE	CODE IDENT. NO	DWG. NO.	REV
<b>B</b>	<b>52158</b>	<b>PS-119</b>	<b>L</b>

DO NOT SCALE DRAWING

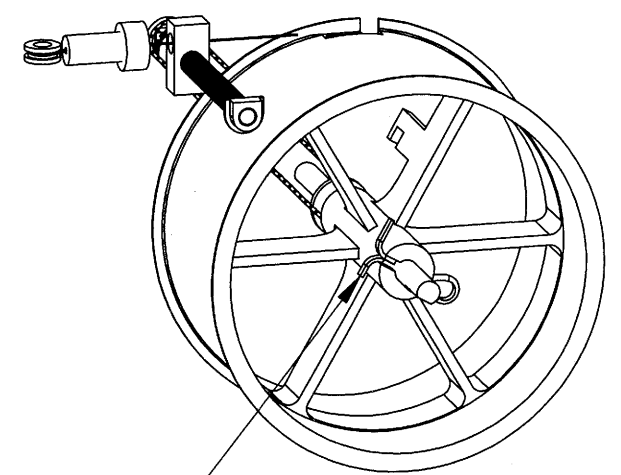
SCALE: 1:2 SHEET 1 OF 11

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
A 46	9677045-0000	LOCKING SCREW	1
A 45	9000451-0005	WASHER,SHIM,ID.195, OD.245, THICKNESS .005	1
A 44	9000451-0004	WASHER,SHIM,ID.195, OD.469, THICKNESS .010	1
A 43	9676741-0000	BRUSH,STRIP,CABLE,PT9000	2
A 42	9007121-440D	MSCR,CRES,0.112-40X0.75 XRSPNHD	2
A 41	SEE SHEET 10	OPTIONAL ELECTRONICS	1
B 40	9013112-1107	SPACER,ROUND,NYLON,0.12 ID X 0.50	2
B 39	9003101-4000	WASHER,CRES#4,PLAIN	3
B 38	9650444-0125	MSCR CRES 0.112-40X0.19 XRSPNH	3
B 37	SEE TABLE 2	CABLE,KIT OPTIONS	1
B 36	9677793-0000	COVER,CABLEGUIDE,ABS,PT9000	1
B 35	9678828-0000	PULLEY,TIMING,VALOX,0.188,PT9K	1
B 34	SEE TABLE 2	CABLE GUIDE ASSEMBLY,PT9000	1
C 33	9650444-0066	CSCR,CRES,0.190-32X0.50,SKTHD	4
C 32	9007121-9304	MSCR CRES 0.190-32X0.19 XRSPHN	2
C 31	9000312-0071	SEAL,O'RING,NITRILE,0.145 ID	2
C 30	9678174-0000	BRACKET,MOUNTING,ALUM,PT9420	1
C 29	9677810-0000	BUSHING,FLANGED,SHAFT,PT9000	2
C 28	SEE SHEET 8	CONNECTOR OPTIONS	1
C 27	9003101-B000	WASHER,PLAIN CRES 0.25I.D.	2
C 26	9008461-B209	CSCR CRES 0.250-20X0.50 SKT HD	2
C 25	SEE TABLE 2	GEAR,SPUR,80 PITCH,MAIN SHAFT	1
D 24	SEE TABLE 2	SENSOR OPTIONS	1
D 23	9679773-0000	BRACKET,POT MOUNTING,PT9000	1
D 22	SEE TABLE 2	GEAR,DELRIN,80PITCH,SENSOR	1
D 21	9650444-0130	CSCR CRES 0.190-32X1.31 SK HD	4
D 20	9678173-0000	BRACKET,MOUNTING,ALUM,PT9000	1
D 19	9000312-0461	SEAL,O'RING,NITRILE,4.239 ID	2
E 18	9015020-0002	PIN,TAPER,5/32 X 3/4,STEEL	1
E 17	9677186-0000	ARBOR,SPRING,PT9000	1
E 16	9676498-0000	SPRING,POWER,2.0IN-LB,PT9000	1
E 15	9000400-0057	WASHER,SHIM,PER DWG 650482	2
E 14	9678363-0000	DISK,PHENOLIC,PT9000	2
E 13	9000410-0015	BEARING .250 X .625 PER 650627	2
E 12	9679473-0000	SPRING HOUSING MACHINED	1
F 11	9000421-0082	BELT,TIMING,82 GROOVE X 0.12WD	1
F 10	9676609-0000	SPACER,SHAFT/SPOOL,PT9000	1
F 9	9678828-0001	PULLEY,TIMING,VALOX,PT9000	1
F 8	9015010-0003	PIN,COTTER,3/32 X 3/4,CRES	1
F 7	9015010-0010	PIN,SPRING,1/16 X 5/16 LONG	2
F 6	900330A-6005	WASHER,NYLON,1/4IDX1/2ODX0.02TK	2
F 5	9676676-0000	SHAFT,MAIN,PT9000	1
F 4	9678185-0000	SPOOL,ALUM,MACHINED,PT9000	1
F 3	900330A-0001	WASHER,NYLON,.25ID X .062 THK	1
F 2	9000312-0102	SEAL,O'RING,NITRILE,0.239 ID	2
F 1	9678183-0000	BODY,MACHINED,ALUM,PT9000	1
G			



**SPOOL AND LEAD SCREW ASSEMBLY**

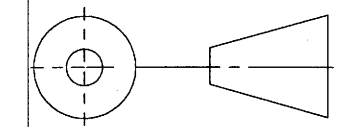
**ORIGINAL**



BEND BOTH ENDS OF THE COTTER PIN 90° MINIMUM AS SHOWN.

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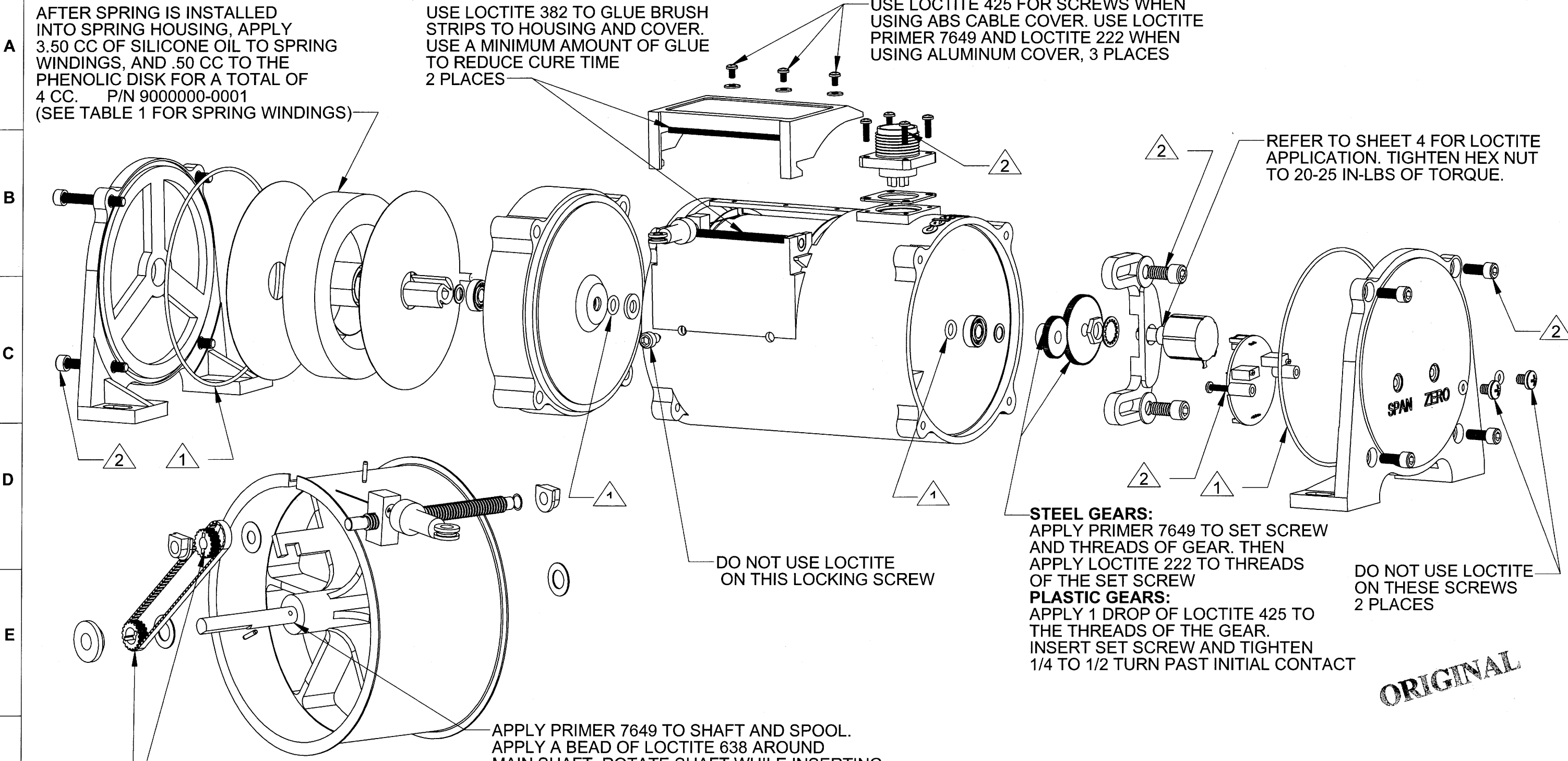
THIRD ANGLE PROJECTION



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www.celesco.com

**TITLE**  
**PT9000 ASSEMBLY DRAWING**  
**75 THRU 550 INCH ALUMINUM**

APPROVALS		DATE	SIZE	CODE IDENT. NO	DWG. NO.	REV
DRAWN M.KRATOFIL		08/31/06	B	52158	PS-119	L
CHKD <i>[Signature]</i>		5/24/11	DO NOT SCALE DRAWING		SCALE: 3:4	SHEET 2 OF 11



**A** AFTER SPRING IS INSTALLED INTO SPRING HOUSING, APPLY 3.50 CC OF SILICONE OIL TO SPRING WINDINGS, AND .50 CC TO THE PHENOLIC DISK FOR A TOTAL OF 4 CC. P/N 9000000-0001 (SEE TABLE 1 FOR SPRING WINDINGS)

USE LOCTITE 382 TO GLUE BRUSH STRIPS TO HOUSING AND COVER. USE A MINIMUM AMOUNT OF GLUE TO REDUCE CURE TIME 2 PLACES

USE LOCTITE 425 FOR SCREWS WHEN USING ABS CABLE COVER. USE LOCTITE PRIMER 7649 AND LOCTITE 222 WHEN USING ALUMINUM COVER, 3 PLACES

REFER TO SHEET 4 FOR LOCTITE APPLICATION. TIGHTEN HEX NUT TO 20-25 IN-LBS OF TORQUE.

DO NOT USE LOCTITE ON THIS LOCKING SCREW

**STEEL GEARS:**  
APPLY PRIMER 7649 TO SET SCREW AND THREADS OF GEAR. THEN APPLY LOCTITE 222 TO THREADS OF THE SET SCREW  
**PLASTIC GEARS:**  
APPLY 1 DROP OF LOCTITE 425 TO THE THREADS OF THE GEAR. INSERT SET SCREW AND TIGHTEN 1/4 TO 1/2 TURN PAST INITIAL CONTACT

DO NOT USE LOCTITE ON THESE SCREWS 2 PLACES

APPLY PRIMER 7649 TO SHAFT AND SPOOL. APPLY A BEAD OF LOCTITE 638 AROUND MAIN SHAFT. ROTATE SHAFT WHILE INSERTING SHAFT INTO SPOOL AND ALIGN SPOOL TO COTTER PIN.

APPLY PRIMER 770 AND 1 DROP OF LOCTITE 401(PINK NOZZLE) TO SHAFT. SLIDE PULLEY OVER SPRING PIN ONTO SHAFT. USE 401 SPARINGLY TO AVOID EXCESS GLUE SPREADING INTO GROOVES OF PULLEY.

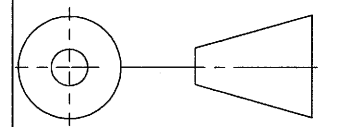
**ORIGINAL**

- G** **2** USE PRIMER 7649 AND LOCTITE 222 ON ALL SCREWS NOTED.  
**1** O-RINGS TO BE COMPLETELY COATED USING PARKER O-RING LUBRICANT P/N 9000000-0002.

**NOTES: UNLESS OTHERWISE SPECIFIED**

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Transducer Products Inc.

TITLE  
**PT9000 ASSEMBLY DRAWING  
75 THRU 550 INCH ALUMINUM**

APPROVALS		DATE	SIZE	CODE IDENT. NO	DWG. NO.	REV
DRAWN M.KRATOFIL		08/31/06	<b>B</b>	<b>52158</b>	<b>PS-119</b>	<b>L</b>
CHKD <i>[Signature]</i>		5/25/11	DO NOT SCALE DRAWING		SCALE: 1:2	SHEET 3 OF 11

A

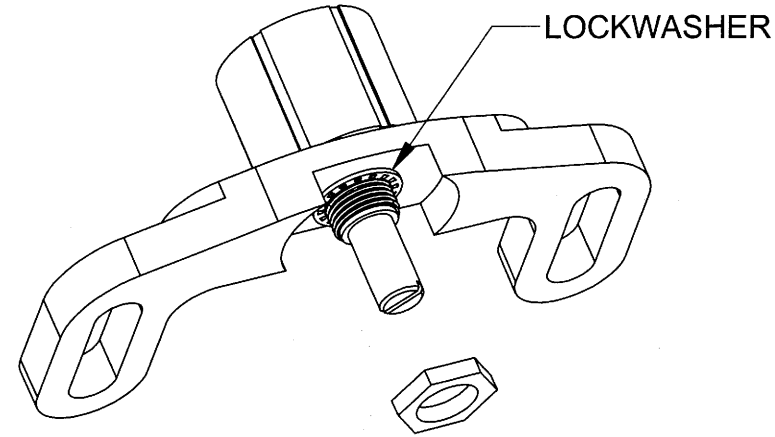
1. INSERT POT THROUGH HOLE IN BRACKET, AND INSTALL WASHER AGAINST BRACKET.

B

2. APPLY 1 DROP OF LOCTITE 222 TO THE THREADS, APPROX. 1 TO 2 THREADS FROM THE TOP OF THE LOCKWASHER USING A BLUE TIPPED DISPENSER.

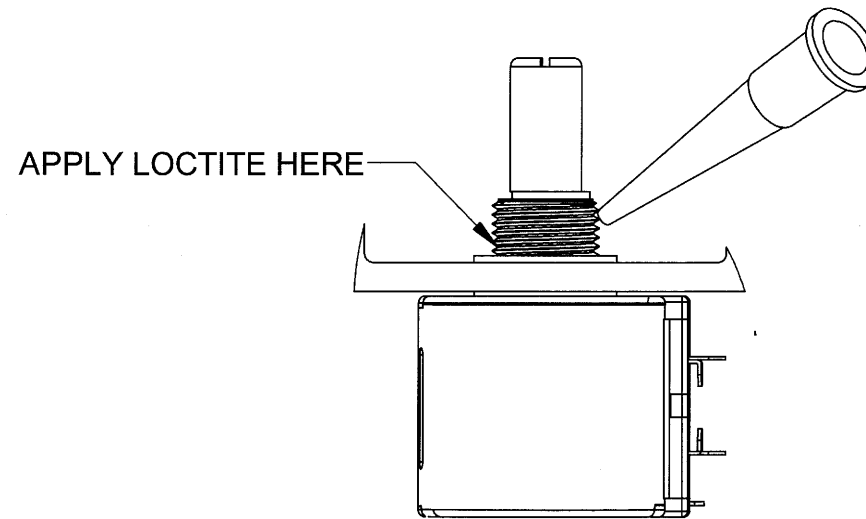
3. ATTACH NUT TO THREADS OF POT AND TIGHTEN TO 20-25 IN-LBS OF TORQUE.

C



D

E



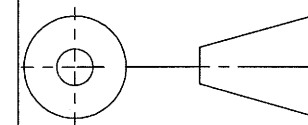
F

G

**ORIGINAL**

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TITLE  
**PT9000 ASSEMBLY DRAWING  
75 THRU 550 INCH ALUMINUM**

APPROVALS		DATE		SIZE	CODE IDENT. NO	DWG. NO.	REV
DRAWN M. KRATOFIL		08/31/06		B	52158	PS-119	L
CHKD <i>[Signature]</i>		<i>[Signature]</i>		DO NOT SCALE DRAWING		SCALE: 3:2	SHEET 4 OF 11

A  
B  
C  
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G

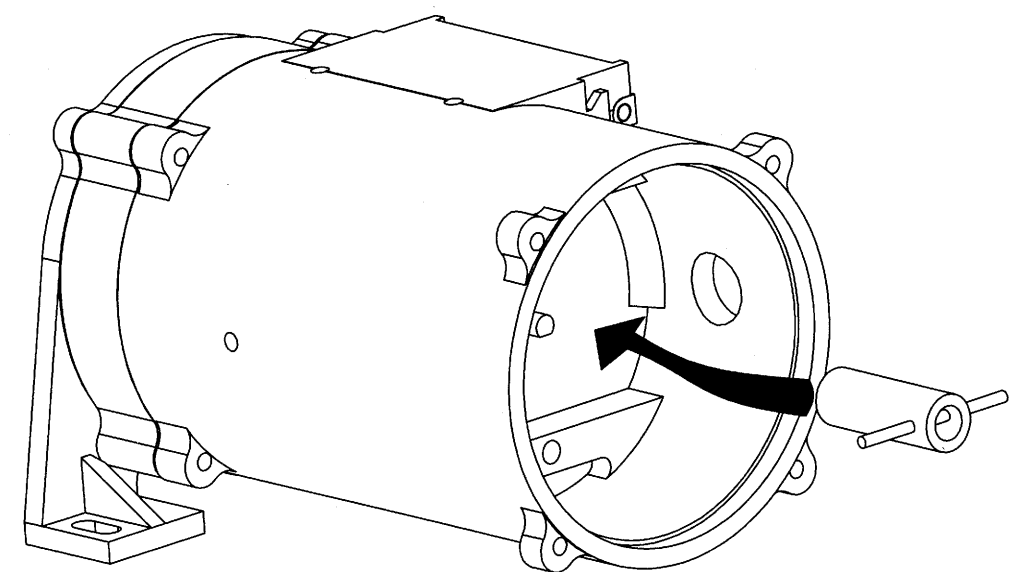


FIG.1

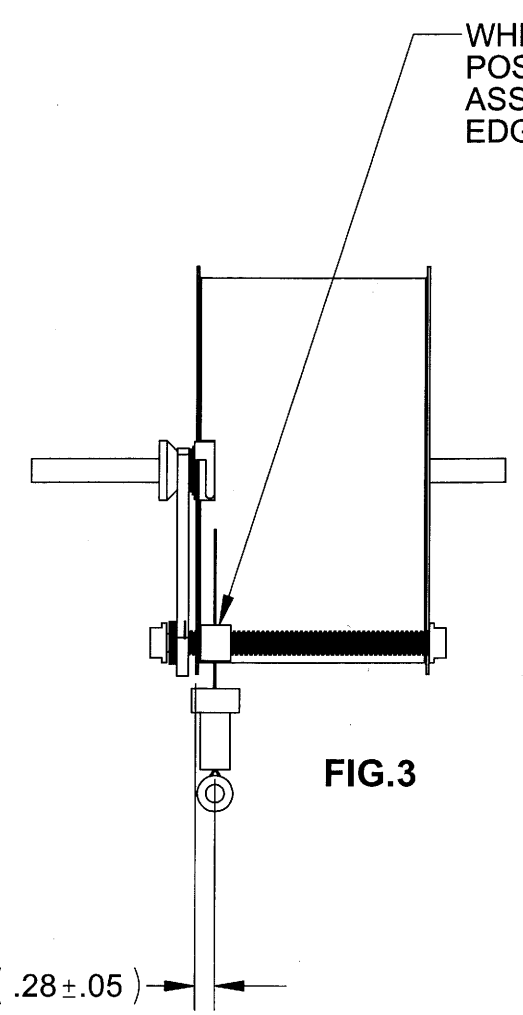


FIG.3

WHEN ATTACHING CABLE TO TRANSDUCER POSITION BLOCK OF LEAD SCREW ASSEMBLY  $.28 \pm .05$  INCHES FROM EDGE OF SPOOL.

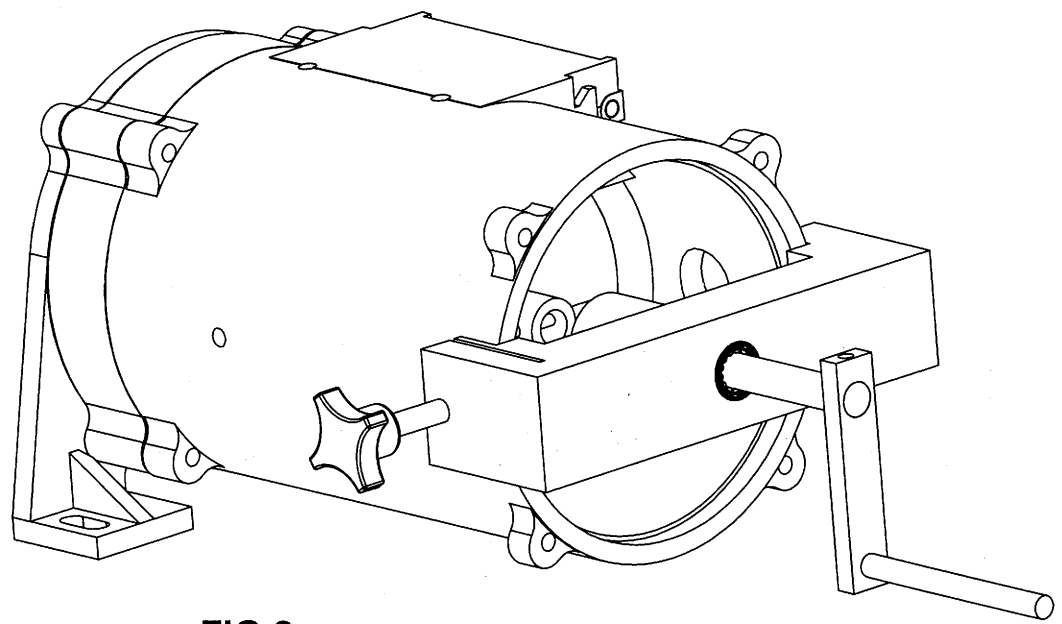


FIG.2

**SPRING WINDING INSTRUCTIONS**

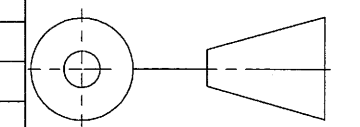
- SLIDE THE SMALL BEARING OF THE WINDING FIXTURE, 9610021-0000 ONTO THE MAIN SHAFT OF THE TRANSDUCER. (FIG.1)
- ATTACH LARGER TOOL TO THE OUTSIDE OF THE PT9000 BODY BY TIGHTENING THE LOCKING KNOB. (FIG.2)
- ROTATE THE HANDLE OF THE FIXTURE PER TABLE 1.
- ADJUST THE LOCATION OF THE CABLE GUIDE BLOCK PER FIG.3.
- FEED THE END OF THE CABLE THRU THE CABLE GUIDE BLOCK AND CRIMP THE SLEEVE ON THE END OF THE CABLE PER PS-35.
- ATTACH THE END OF THE CABLE TO THE HOOK ON THE SPOOL.
- LOOSEN KNOB ON FIXTURE WHILE HOLDING THE CABLE FROM RETRACTING. AFTER THE FIXTURE IS REMOVED FROM THE BODY, LET THE CABLE RETRACT SLOWLY ONTO THE SPOOL.

1 TURNS OF MAIN SHAFT ARE THE TOTAL TURNS WOUND USING FIXTURE 9610021-0000 BEFORE ATTACHING THE CABLE TO THE SPOOL.

RANGE	TURNS OF MAIN SHAFT <sup>1</sup>
75	35
100	35
150	35
200	35
250	35
300	35
350	35
400	39
450	43
500	47
550	51

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THIRD ANGLE PROJECTION



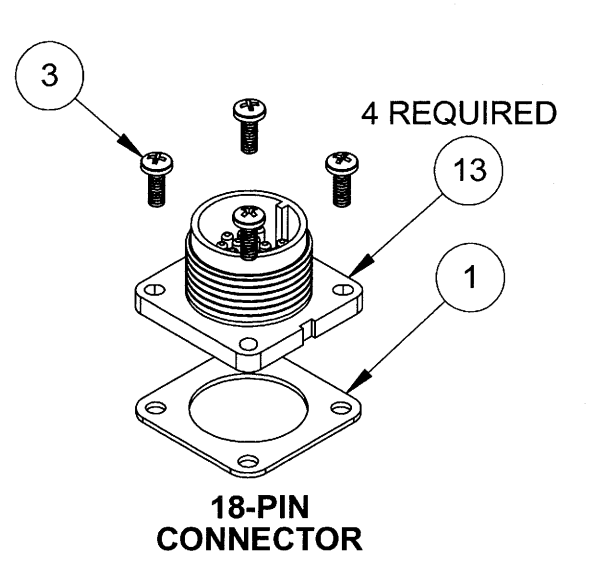
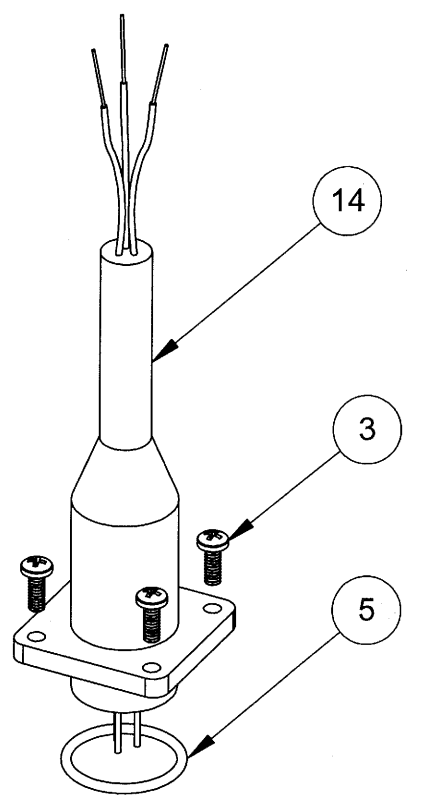
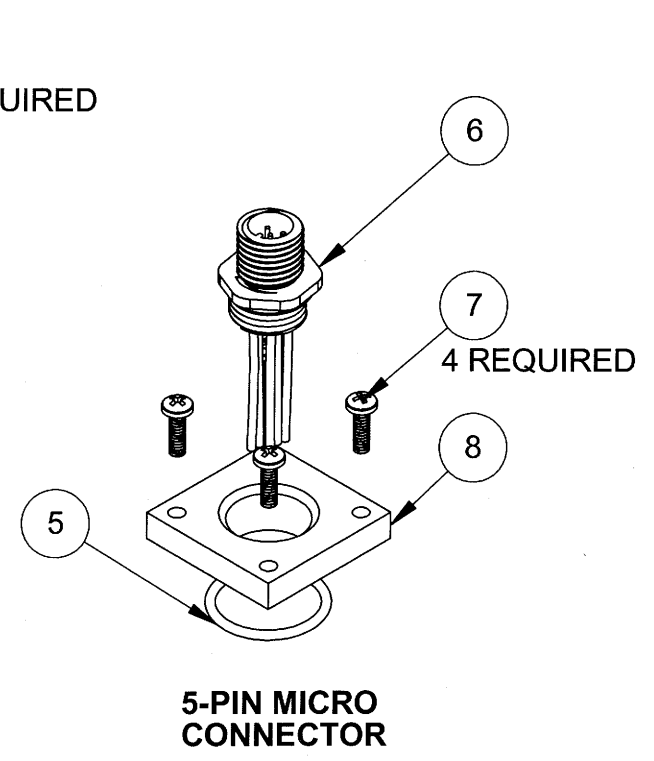
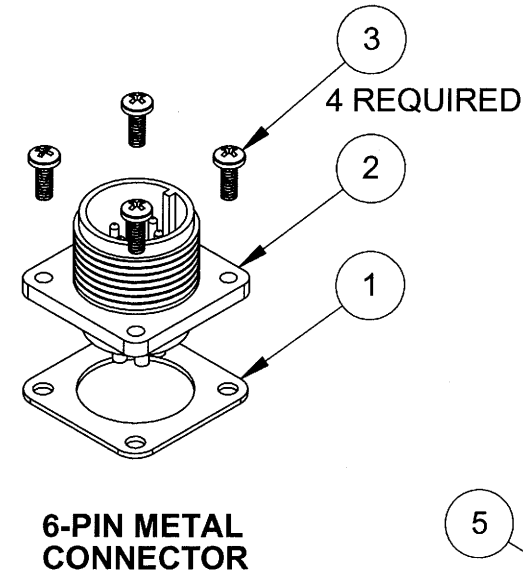
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TITLE  
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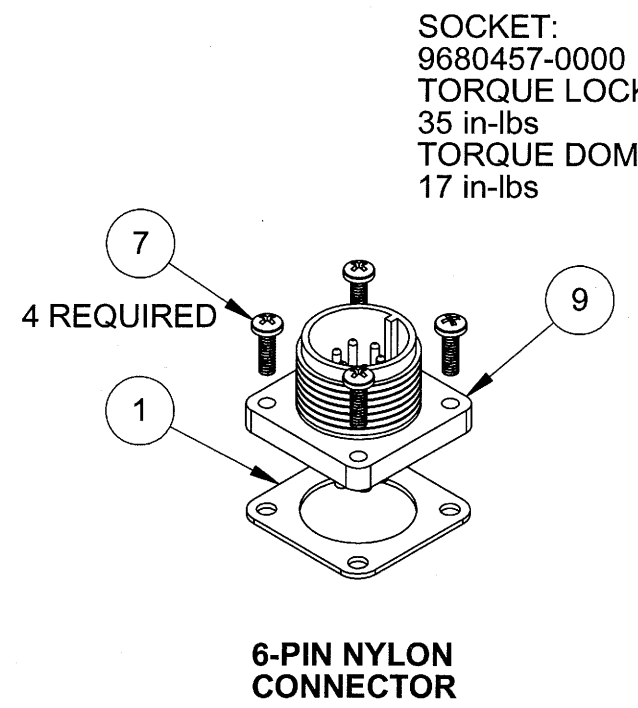
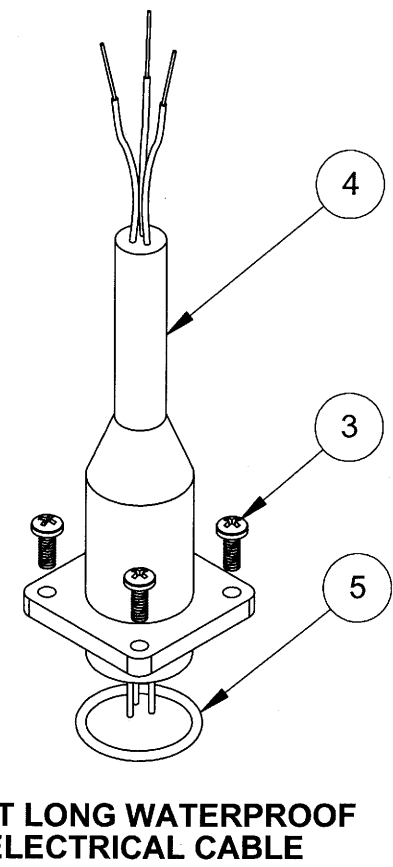
APPROVALS		DATE		SIZE	CODE IDENT. NO	DWG. NO.	REV
DRAWN	M.KRATOFIL	08/31/06					
CHKD	<i>Jr</i>	5/25/11		<b>B</b>	<b>52158</b>	<b>PS-119</b>	<b>L</b>
DO NOT SCALE DRAWING				SCALE: 1:2		SHEET 5 OF 11	

**ORIGINAL**

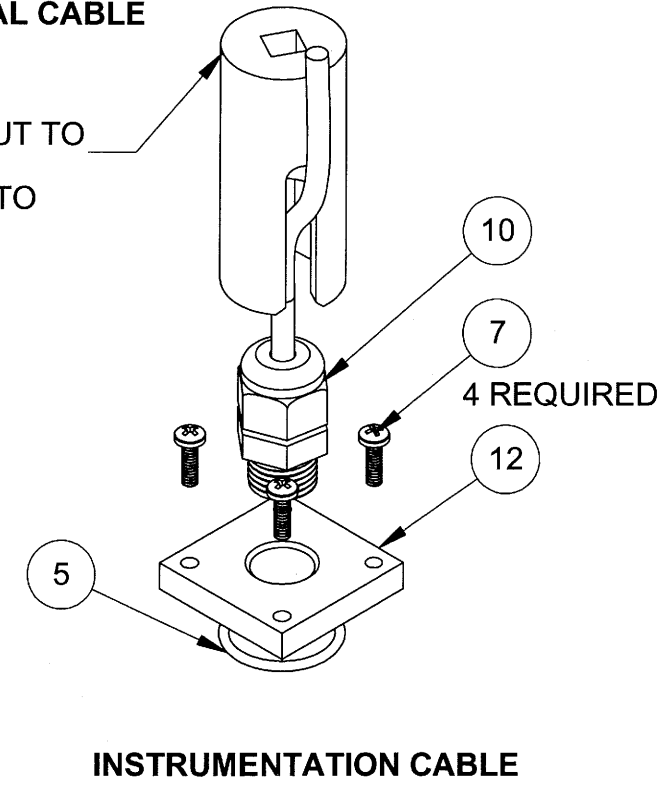
A  
B  
C  
D  
E  
F  
G



**ORIGINAL**



SOCKET:  
9680457-0000  
TORQUE LOCKING NUT TO  
35 in-lbs  
TORQUE DOME NUT TO  
17 in-lbs



14	9603574-0100	SUBASSY,CBL,UNDWTR,3COND,100FT
13	9676967-0000	CONNECTOR,MOD,18 PIN
12	9670137-0001	ADAPTER,CABLE,ALUMINUM
11	9000312-0131	SEAL,O'RING,NITRILE,0.426 ID
10	9032000-0015	STRAIN RELIEF,LIQ-TIGHT,GRAY
9	9035830-0001	CONN,NYLON,BOX-MTG,14SHELL,6PIN
8	9678229-0000	ADAPTER,CABLE,ALUMINUM
7	9650444-0119	MSCR CRES 0.112-40X.38 XRS PNHD
6	9035701-0025	CONN,5 PIN,M12 MICRO,PANEL MOUNT
5	9000312-0181	SEAL,O'RING,NITRILE,0.739 ID
4	9603574-0010	SUBASSY,CBL,UNDWTR,3COND,10 FT
3	9650444-0092	MSCR,CRES,.112-40X.31,PAN HEAD
2	9035810-0001	CONN,METAL,BOX-MTG,14SHELL,6PIN
1	9000320-0006	GASKET,FLANGED CONN,14 SHELL

ITEM NO. PART NO. DESCRIPTION

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APPROVALS		DATE	TITLE	
DRAWN	M.KRATOFIL	08/31/06	PT9000 ASSEMBLY DRAWING	
CHKD	<i>[Signature]</i>	5/24/11	SIZE	CODE IDENT. NO
DO NOT SCALE DRAWING			<b>B</b>	<b>52158</b>
			DWG. NO.	REV
			<b>PS-119</b>	<b>L</b>
			SCALE: 3:4	SHEET 6 OF 11

1. FOR WATERPROOF ELECTRICAL CABLES, SEE PS-92 TO ADD SMALLER GAUGE WIRES TO CABLE.

NOTES: UNLESS OTHERWISE SPECIFIED.

A	<b>PT9101</b>			
	POTENTIOMETER			
		<b>CCW (1)</b>	<b>CW (3)</b>	<b>S (2)</b>
	6-PIN CONNECTOR	PIN A	PIN B	PIN C
	INSTRUMENTATION CABLE	RED	BLACK	GREEN
WATERPROOF CABLE	WHITE	BLACK	GREEN	

B	<b>PT9DN and PT9CN</b>			
	3-PIN HARNESS 604019			
		<b>WHITE</b>	<b>GREEN</b>	<b>BLACK</b>
POTENTIOMETER	CCW (1)	S (2)	CW (3)	

C	<b>PT9232</b>					
		6-PIN HARNESS 604017		4-PIN HARNESS 604141		
		<b>RED</b>	<b>BLACK</b>	<b>WHITE</b>	<b>BLACK</b>	<b>GREEN</b>
	6-PIN CONNECTOR	PIN A	PIN B	PIN D	PIN E	PIN F
	INSTRUMENTATION CABLE	RED	BLACK	GREEN	BLUE	BROWN
D		3-PIN HARNESS 604019				
		<b>WHITE</b>	<b>GREEN</b>	<b>BLACK</b>		
	POTENTIOMETER	CCW (1)	S (2)	CW (3)		

E	<b>PT9420 (CSA APPROVED)</b>				
	WIRES SOLDERED TO PC BOARD				
		<b>RED (E7)</b>	<b>BLACK (E6)</b>	<b>GREEN (E5)</b>	
	6-PIN CONNECTOR	PIN A	PIN B	PIN D	
	INSTRUMENTATION CABLE	RED	BLACK	GREEN	
	WATERPROOF CABLE	WHITE	BLACK	GREEN	
		WIRES SOLDERED TO PC BOARD			
		<b>WHITE (E1)</b>	<b>GREEN (E4)</b>	<b>BLACK (E2)</b>	
	POTENTIOMETER	CCW (1)	S (2)	CW (3)	

F	<b>PT9510 (0-5 VDC, 0-10 VDC)</b>			
	4-PIN HARNESS 604066			
		<b>WHITE</b>	<b>GREEN</b>	<b>BLACK</b>
	6-PIN CONNECTOR	PIN A	PIN B	PIN C
	INSTRUMENTATION CABLE	RED	GREEN	BLACK
	WATERPROOF CABLE	WHITE	GREEN	BLACK
	G		3PIN HARNESS 604019	
		<b>WHITE</b>	<b>GREEN</b>	<b>BLACK</b>
POTENTIOMETER		CCW (1)	S (2)	CW (3)

<b>PT9510 (-5 TO +5 VDC, and -10 TO +10 VDC)</b>				
WIRES SOLDERED TO PC BOARD				
	<b>RED</b>	<b>GREEN</b>	<b>BLACK</b>	
6-PIN CONNECTOR	PIN A	PIN B	PIN C	
INSTRUMENTATION CABLE	RED	GREEN	BLACK	
WATERPROOF CABLE	WHITE	GREEN	BLACK	
B		WIRES SOLDERED TO PC BOARD		
		<b>WHITE</b>	<b>GREEN</b>	<b>BLACK</b>
	POTENTIOMETER	CW (1)	S (2)	CCW (3)

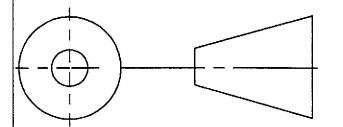
<b>PT9420 (2-WIRE 4-20mA)</b>				
4-PIN HARNESS 604066				
	<b>WHITE</b>	<b>BLACK</b>	<b>GREEN</b>	
6-PIN CONNECTOR	PIN A	PIN B	PIN D	
INSTRUMENTATION CABLE	RED	BLACK	GREEN	
WATERPROOF CABLE	WHITE	BLACK	GREEN	
D		3-PIN HARNESS 604019		
		<b>WHITE</b>	<b>GREEN</b>	<b>BLACK</b>
	POTENTIOMETER	CCW (1)	S (2)	CW (3)

<b>PT9420 (3-WIRE 4-20mA)</b>				
4-PIN HARNESS 604066				
	<b>WHITE</b>	<b>BLACK</b>	<b>GREEN</b>	
6-PIN CONNECTOR	PIN A	PIN B	PIN C	
INSTRUMENTATION CABLE	RED	BLACK	GREEN	
WATERPROOF CABLE	WHITE	BLACK	GREEN	
D		3-PIN HARNESS 604019		
		<b>WHITE</b>	<b>GREEN</b>	<b>BLACK</b>
	POTENTIOMETER	CCW (1)	S (2)	CW (3)

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THIRD ANGLE PROJECTION



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Chatsworth, CA. 91311  
Tel:(818)701-2750 Fax:(818)701-2799  
www.celesco.com  
Transducer Products Inc.

TITLE  
**PT9000 ASSEMBLY DRAWING  
75 THRU 550 INCH ALUMINUM**

APPROVALS		DATE	SIZE	CODE IDENT. NO	DWG. NO.	REV
DRAWN	M.KRATOFIL	08/31/06	B	52158	PS-119	L
CHKD	<i>[Signature]</i>	5/25/11	DO NOT SCALE DRAWING		SCALE: 1:1	SHEET 7 OF 11

TABLE 2

MODEL	PT9101	PT9101 2 mv/V	PT9101 ADJ 30mv/v	PT9420 2-WIRE	PT9420 (CSA)	PT9420 3-WIRE	PT9510 (0-10VDC)	PT9510 (-10 TO +10VDC)	PT9510 (0-5VDC)	PT9510 (-5 TO +5 VDC)	PT9232	PT9DN	PT9CN
ELECTRONIC SUBASSY	NONE	9603980-0016	9603980-0013	9604068-0001	9603820-0000	9604095-0001	9604104-0001	9603961-0001	9604104-0001	9604011-0001	9604014-0001	9603945-0001	9604012-0001
CABLE GUIDE ASSEMBLIES	CABLE GUIDE ASSEMBLY FOR $\phi$ .034 CABLE 9603846-0005												
	CABLE GUIDE ASSEMBLY FOR $\phi$ .047 CABLE 9603846-0003												
	CABLE GUIDE ASSEMBLY FOR $\phi$ .062 CABLE 9603846-0004												
SENSOR GEARS	75 INCH GEARS			POT GEAR: 9678770-0044		MAIN SHAFT GEAR: 9678770-0070							
	100 INCH GEARS			POT GEAR: 9678770-0070		MAIN SHAFT GEAR: 9678770-0085							
	150 INCH GEARS			POT GEAR: 9678770-0070		MAIN SHAFT GEAR: 9678770-0055							
	200 INCH GEARS			POT GEAR: 9678770-0090		MAIN SHAFT GEAR: 9000440-0019							
	250 INCH GEARS			POT GEAR: 9678770-0065		MAIN SHAFT GEAR: 9000440-0035							
	300 INCH GEARS			POT GEAR: 9678770-0110		MAIN SHAFT GEAR: 9678770-0043							
	350 INCH GEARS			POT GEAR: 9678770-0085		MAIN SHAFT GEAR: 9678949-0029							
	400 INCH GEARS			POT GEAR: 9678770-0100		MAIN SHAFT GEAR: 9000440-0034							
	450 INCH GEARS			POT GEAR: 9678770-0110		MAIN SHAFT GEAR: 9678949-0029							
CABLE KITS	CABLE ASSEMBLY FOR $\phi$ .034 NYLON COATED CABLE			9603803-XXXX (SEE NOTE 1)									
	CABLE ASSEMBLY FOR $\phi$ .047 STAINLESS STEEL CABLE			9603859-XXXX (SEE NOTE 1)									
CABLE ASSEMBLY FOR $\phi$ .062 THERMOPLASTIC CABLE			9603650-XXXX (SEE NOTE 1)										
SENSOR POTS (FOR ENCODERS SEE TABLE 3)	10 TURN, 500 OHM POTENTIOMETER			9085000-0003									
	10 TURN, 1K OHM POTENTIOMETER			9085000-0006									
	10 TURN, 5K OHM POTENTIOMETER			9085000-0010									
	10 TURN, 10K OHM POTENTIOMETER			9085000-0002									

**F**

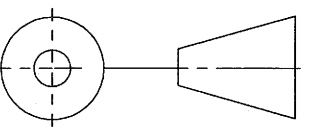
**G** 1. DASH NUMBER OF CABLE ASSEMBLY EQUALS THE RANGE OF THE TRANSDUCER IN INCHES.

NOTES: UNLESS OTHERWISE SPECIFIED

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DRAWN	M.KRATOFIL	08/31/06					
CHKD	<i>[Signature]</i>	<i>[Signature]</i>		<b>DO NOT SCALE DRAWING</b>		SCALE: 1:2	SHEET 8 OF 11



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D

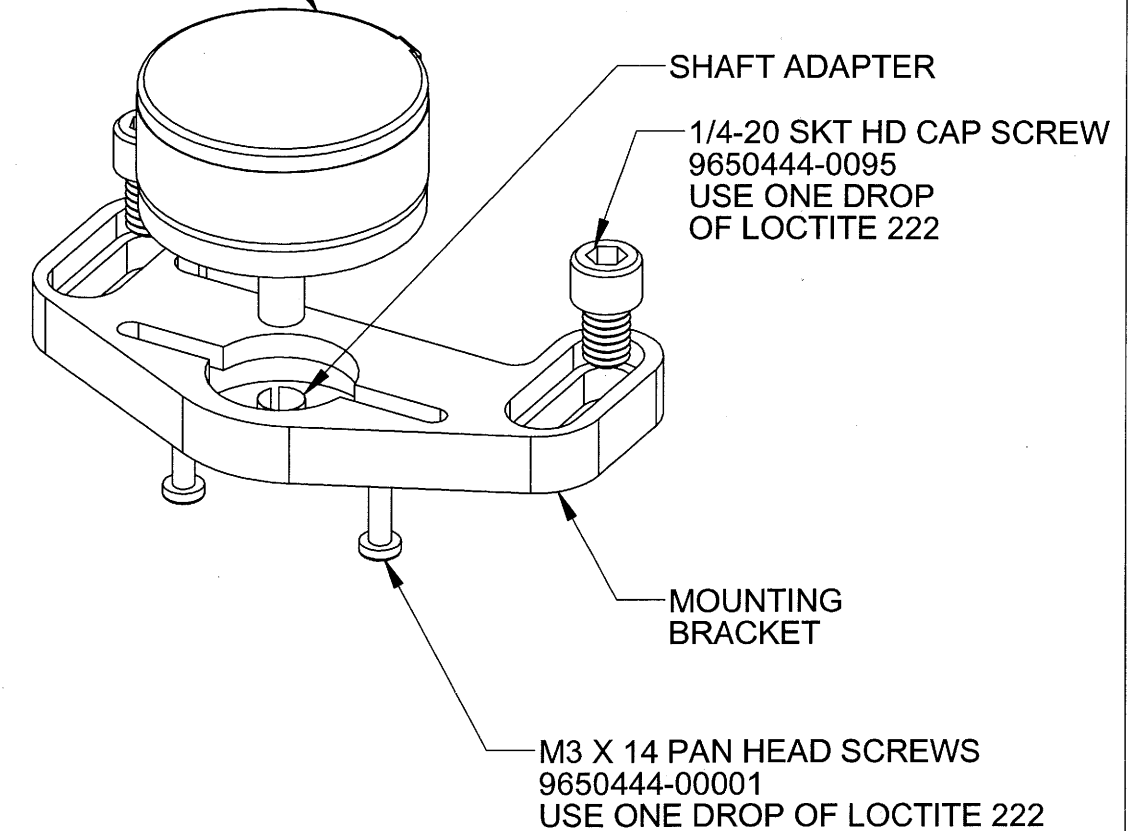
E

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G

TABLE 3 (for PT9150)		
BRACKET	ENCODER MOUNTING BRACKET	9676833-0000
SENSORS (ENCODERS)	5 VDC TTL/CMOS/A,B, 1000 LINES PER REV	9650648-1000
	5 VDC TTL/CMOS/A,B, 2000 LINES PER REV	9650648-2000
	5 VDC TTL/CMOS/A,B, 2500 LINES PER REV	9650648-2500
	5 VDC TTL/CMOS/A,B, 100 LINES PER REV	9650648-0100
	10.8-26.4 VDC OPEN COLLECTOR/A,B, 1000 LINES	9650650-1000
	10.8-26.4 VDC OPEN COLLECTOR/A,B, 2000 LINES	9650650-2000
	10.8-26.4 VDC OPEN COLLECTOR/A,B, 2500 LINES	9650650-2500
	10.8-26.4 VDC OPEN COLLECTOR/A,B, 100 LINES	9650650-0100
	5 VDC LINE DRIVER, 1000 LINES PER REV	9650649-1000
	5 VDC LINE DRIVER, 2000 LINES PER REV	9650649-2000
	5 VDC LINE DRIVER, 2500 LINES PER REV	9650649-2500
	5 VDC LINE DRIVER, 100 LINES PER REV	9650649-0100
	5-28 VDC UNIVERSAL LINE DRIVER, 1000 LINES	9650649-1000
	5-28 VDC UNIVERSAL LINE DRIVER, 2000 LINES	9650649-2000
5-28 VDC UNIVERSAL LINE DRIVER, 2500 LINES	9650649-2500	
5-28 VDC UNIVERSAL LINE DRIVER, 100 LINES	9650649-0100	
SENSOR GEARS	ENGLISH RESOLUTIONS ENCODER SHAFT	9678770-0043
	MAIN SHAFT	9678770-0055
	METRIC RESOLUTIONS ENCODER SHAFT	9000440-0035
	MAIN SHAFT	9000440-0017
SHAFT ADAPTER	6MM TO .25 DIAMETER SHAFT ADAPTER	9650496-0000

REFER TO TABLE 3  
FOR ENCODER OPTIONS



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APPROVALS DRAWN M.KRATOFIL 08/31/06 CHKD <i>[Signature]</i> 5/22/11		DATE 08/31/06		TITLE <b>PT9000 ASSEMBLY DRAWING 75 THRU 550 INCH ALUMINUM</b>	
DO NOT SCALE DRAWING		SIZE <b>B</b>	CODE IDENT. NO <b>52158</b>	DWG. NO. <b>PS-119</b>	REV <b>L</b>
		SCALE: 1:1		SHEET 9 OF 11	

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B  
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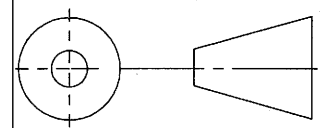
### CONNECTOR TO ENCODER WIRING CHART

		COMS/TTL AND OPEN COLLECTOR	5V LINE DRIVER AND UNIVERSAL LINE DRIVER		
		9650648-0100 9650648-1000 9650648-2000 9650648-2500 9650650-0100 9650650-1000 9650650-2000 9650650-2500	9650649-0100 9650649-1000 9650649-2000 9650649-2500		
6 PIN CONNECTOR	PIN A	RED	RED	INPUT COMMON CHANNEL B CHANNEL A CHANNEL B' CHANNEL A'	ENCODER FUNCTION
	PIN B	BLACK	BLACK		
	PIN C	WHITE	WHITE		
	PIN D	GREEN	GREEN		
	PIN E	--	GRAY		
	PIN F	--	BLUE		
18 PIN CONNECTOR	PIN 1	--	RED	INPUT COMMON CHANNEL A CHANNEL B INDEX Z CHANNEL A' CHANNEL B' INDEX Z'	ENCODER FUNCTION
	PIN 2	--	BLACK		
	PIN 3	--	GREEN		
	PIN 6	--	WHITE		
	PIN 7	--	YELLOW		
	PIN 11	--	BLUE		
	PIN 12	--	GRAY		
PIN 15	--	ORANGE			
INSTRUMENTATION CABLE	RED	RED	RED	INPUT COMMON CHANNEL B CHANNEL A CHANNEL B' CHANNEL A' INDEX Z INDEX Z'	ENCODER FUNCTION
	BLACK	BLACK	BLACK		
	GREEN	WHITE	WHITE		
	WHITE	GREEN	GREEN		
	BLUE	--	GRAY		
	BROWN	--	BLUE		
	YELLOW	--	YELLOW		
	ORANGE	--	ORANGE		

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DRAWN M.KRATOFIL	08/31/06	<b>B</b>	<b>52158</b>	<b>PS-119</b>	<b>L</b>
CHKD <i>[Signature]</i>	<i>[Signature]</i>	DO NOT SCALE DRAWING		SCALE: 1:1	SHEET 10 OF 11



# DRAWING CHANGE NOTICE

DRAWING NO. **PS-119** REV. **L**  
**SHEET 11 OF 11**

DISPOSITION OF PARTS	USE AS IS	MUST CONFORM	PART NAME <b>PT9000 ASSEMBLY DRAWING</b>			DCN NO. <b>8145</b>		
IN FABRICATION		<b>X</b>	<b>ENGINEERING APPROVAL</b>			COPIES TO	YES	NO
IN STOCK		<b>X</b>		SIGNATURE	DATE	ENGINEERING	<b>X</b>	
BOXED PARTS		<b>X</b>	PREPARED BY	MSK	05/25/2011	INSPECTION	<b>X</b>	
IN ASSEMBLIES		<b>X</b>	CHECKED BY	<i>[Signature]</i>	5/25/11	PLANNING	<b>X</b>	
IN BOND		<b>X</b>	APPROVED	<i>[Signature]</i>	5/26/11	PRODUCTION	<b>X</b>	
CUSTOMER REWORK		<b>X</b>	GEN MGR	<b>X</b>	<b>X</b>	PURCHASING	<b>X</b>	
			DCR NO. (IF APPLICABLE)	<b>0000</b>		QMR	<b>X</b>	
						SALES	<b>X</b>	

CHANGE NO	REVISED OR CHANGED FROM	SHEET / ZONE	ADDED OR CHANGED TO
1	DRAWING WAS REV. K		IS NOW REV. L
3	SPRING TURNS FOR 75 THRU 350 INCHES WAS: 50 TURNS	sht 5 /F6	IS NOW: 35 TURNS
4	SPRING TURNS FOR 400 INCHES WAS: 50 TURNS	sht 5 /F6	IS NOW: 39 TURNS
2	SPRING TURNS FOR 450 INCHES WAS: 50 TURNS	sht 5 /F5	IS NOW: 43 TURNS
5	SPRING TURNS FOR 500 INCHES WAS: 50 TURNS	sht 5 /F5	IS NOW: 47 TURNS
6	SPRING TURNS FOR 550 INCHES WAS: 53 TURNS	sht 5 /F5	IS NOW: 51 TURNS

**NOTES** During cycle testing on RBS9600-0350-2X4-HE-632616B, cycle life was found to be significantly under specification of 250,000 cycles (see lab report 327). During subsequent testing it was shown that reducing the total amount of pre-turns increased life significantly. (see lab report 350),

**REMARKS:**