

ATLANTIC VERSION TERMINATOR INTERFACE ADAPTER	PART NUMBER	REVISION	DESCRIPTION	FEED TYPE	APPLICATOR STYLE CONVERSION CHART					
					CONVERT TO	PART NUMBERS REQUIRED				
	2150510-2	A	FINE CRIMP HEIGHT ADJUST	PNEUMATIC	-	-	-	-	-	-
	2150510-5	A	FINE CRIMP HEIGHT ADJUST	SERVO LATCH PLATE	2119951-1	1901697-1	8-2150510-5	-	-	2168400-7 (QUANTITY 2)
	2150510-6	A	NON-CRIMP HEIGHT ADJUST	SERVO LATCH PLATE	2161326-1	-	8-2150510-4	-	-	-
	2150510-7	A	FINE CRIMP HEIGHT ADJUST	NONE	-	-	-	-	-	-
	7-2150510-7	A	CRIMP TOOLING KIT	-	-	-	-	-	-	-

APPLICATOR DATA		
CRIMP	SIZE	TYPE
WIRE	2.59 mm [.102]	F
INSUL	3.40 mm [.134]	F
APPL INSTRUCTIONS 408-10390		

TERMINAL DATA: SAMSUNG TERMINAL SAMSUNG CRIMP SPECIFICATION	
TERMINAL NAME: SAMSUNG TERMINAL	
WIRE STRIP LENGTH	INSULATION DIAMETER RANGE
TERMINAL APPLICATION SPECIFICATION	SAMSUNG SPEC Rev
TERMINALS APPLIED	
TE TERMINAL	SAMSUNG TERMINAL
2113621-1	DB65-00305B

WIRE SIZE	CRIMP HEIGHT mm [INCH]	CRIMP HEIGHT REFERENCE SETTING
Ø1.0mm (Solide)	1.61+/-0.05 [.063+/- .002]	7.4

- RECOMMENDED SPARE PARTS
- GREASE BEARING SURFACES LIGHTLY
- LUBRICATE DAILY PER THE APPLICATOR INSTRUCTION SHEET SUPPLIED WITH THE APPLICATOR.
- APPLICATOR SPECIFIC DATA TO BE ENTERED INTO BLANK MEMORY CHIP AT ASSEMBLY. SEE BELOW FOR PART NUMBER:
 PNEUMATIC FEED WITH "SMART APPLICATOR" CONVERSION: 8-2150510-4
 SERVO FEED WITH "FINE CRIMP HEIGHT ADJUST": 8-2150510-5
 SERVO FEED WITH "NON-CRIMP HEIGHT ADJUST": 8-2150510-6
- ADJUSTMENT OF THE STRIPPER MAY BE REQUIRED WHEN MOVING THE APPLICATOR BETWEEN BENCH AND LEADMAKER APPLICATIONS.
- APPLY PART NUMBER 1-23419-5 LOCTITE TO THREADS OF ITEMS 62. APPLY PART NUMBER 2-23419-6 LOCTITE TO THREADS OF ITEM 242. FOR -6 ONLY APPLY PART NUMBER 1-23419-5 LOCTITE TO THREADS OF ITEMS 37.
- GREASE THREADS, GROOVE AND O-RING ON ITEMS 35 & 252.
- MAGNET, ITEM 166 MUST BE ORIENTED CORRECTLY IN ORDER TO PROPERLY ACTUATE THE COUNTER.
- CRIMP HEIGHT REFERENCE SETTING WAS THE SETTING USED WHEN THE APPLICATOR WAS QUALIFIED AT THE FACTORY. ADJUSTMENT MAY BE NECESSARY WHEN RUNNING APPLICATOR IN THE FIELD.
- TERMINAL PITCH NOT COMPATIBLE WITH MECHANICAL FEED.
- WHEN ASSEMBLING -6 NON-CRIMP HEIGHT ADJUST APPLICATOR USE SHIM PACK 2119957-2 TO ALIGN APPLICATOR'S MAXIMUM WIRE CRIMP HEIGHT AT NORMAL TERMINATOR SHUT HEIGHT
- SAMSUNG TOOLING DRAWING 305B.

***WARNING**
 ON INSTALLATION, SET WIRE DISC, ITEM 40 TO LARGEST WIRE SIZE SETTING. USE OF SETTINGS BELOW MINIMUM REQUIRED CRIMP HEIGHT SETTING WILL CAUSE DAMAGE TO CRIMP TOOLING.

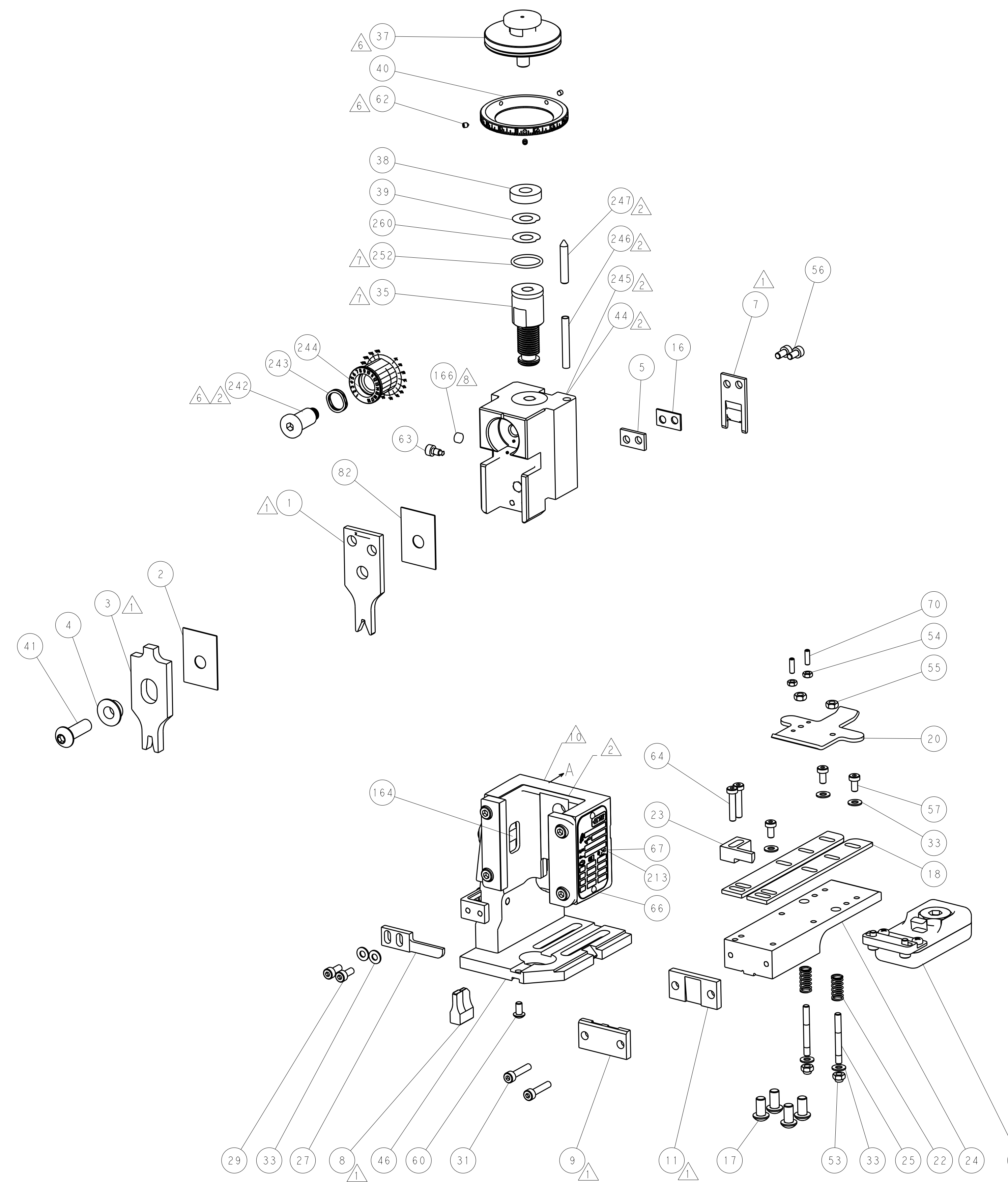
ATLANTIC VERSION
 Shown on sheets 1 of 4 & 2 of 4
 (Pacific version shown on sheets 3 of 4 & 4 of 4)

SET UP GAUGE	LOC	DIST	REVISIONS			
2119599-2	A	66	REV	DATE	BY	APPD
			1	DEVELOPMENT	13MAY2015	JH UG
			A	RELEASED	10JUN2015	JH UG

-	-	1	-	-	2119957-2	APPLICATOR SHIM PACK	260
-	1	-	1	1	8-21084-0	O-RING, .676 ID, .070 DIA. MAT.	252
-	-	-	-	1	2119640-1	PUSH ROD, AIR FEED	250
-	-	-	-	1	2079988-1	BUSHING, LCH5-12, MISUMI	249
-	-	-	-	1	2119641-1	FEED CAM, AIR FEED	248
-	1	-	1	1	2119798-1	DETENT PIN	247
-	1	-	1	1	1-22279-3	SPRING, COMPRESSION	246
-	-	1	-	-	2119759-1	RAM, AMP STYLE, END FEED, NON-ADJUST	245
-	1	1	1	1	2119082-4	CAM, SNAIL, INSULATION ADJUSTMENT	244
-	1	1	1	1	2079764-1	WASHER, WAVE SPRING, CREST-TO-CREST	243
-	1	1	1	1	2119083-1	RETAINER, INSULATION DIAL	242
-	-	2	2	-	2168400-7	SHCS, LOW HEAD, RoHS, M5 X 10	240
-	-	-	-	1	2063440-1	AIR FEED MODULE	238
-	-	1	1	-	2119740-2	TAG, IDENTIFICATION	213
-	-	REFREF	-	-	1901697-1	FEED FINGER ASSEMBLY, EF	183
-	-	-	-	2	21045-3	RING, RETAIN, EXTERN, 3/16 CRESCENT	172
-	1	1	1	1	994969-1	MAGNET, RARE EARTH HIGH ENERGY	166
-	REFREF	REFREF	-	-	994970-2	COUNTER, MAGNETIC	164
-	-	-	-	1	240638-1	SPRING, FEED FINGER	163
-	-	-	-	1	3-23627-7	PIN, RETAIN, GRVD, 3/16 X .854	137
-	-	REFREF	-	-	SEE NOTE 4	MEMORY CHIP, PROGRAMMED	135
-	-	1	1	-	1633743-1	SERVO FEED LATCH ASM	133
-	1	1	1	1	2119955-2	ASSY, LUBRICATOR, END FEED	84
-	1	1	1	1	455888-5	SPACER, CRIMPER	82
-	1	1	1	1	2119956-2	DOCUMENTATION PACKAGE	71
-	2	2	2	2	2-18032-2	SCR, SET, FLT POINT M3 X 10.0	70
-	1	-	-	1	2119740-1	TAG, IDENTIFICATION	67
-	2	2	2	2	2168078-1	SCREW, DRIVE, RH, RoHS, 2 x .188	66
-	2	2	2	2	2168400-5	SHCS, LOW HEAD, RoHS, M4 X 20	64
-	1	-	1	1	2119793-1	LIMITER, ADJUSTMENT BOLT	63
-	3	-	3	3	992763-5	SCR, SET, SOC, CONE POINT, M3 X 4.0	62
-	1	1	1	1	2079383-4	SCR, BHSC, RoHS (M4 X 8)	60
-	3	3	3	3	2168400-4	SHCS, LOW HEAD, RoHS, M4 X 8	57
-	2	2	2	2	2168083-2	SCR, SKT HD CAP, RoHS, M4 X 8.0	56
-	2	2	2	2	5018030-2	NUT, HEX, REG, RoHS, M4	55
-	2	2	2	2	5018030-1	NUT, HEX, REG, RoHS, M3	54
-	2	2	2	2	986965-8	NUT, LOCK, HEX, TORQUE (M4)	53
-	-	-	-	1	2119792-2	PAWL, EF, AIR	51
-	-	-	-	1	18023-9	SCR, SKT HD CAP M4 X 6.0	49
-	1	1	1	1	2119655-5	APPLICATOR BASIC ASSEMBLY, EF	46
-	1	-	1	1	2119369-1	RAM, AMP STYLE, END FEED	44
-	1	1	1	1	2079383-7	SCR, BHSC, RoHS (M8 X 25)	41
-	1	-	1	1	2119645-1	DISC, NUMBERED FA WIRE ADJUSTMENT	40
-	1	-	1	1	2119957-1	APPLICATOR SHIM PACK	39
-	1	1	1	1	1-2119644-2	RAM WASHER, PRECISION	38
-	1	1	1	1	2119085-1	FA HEAD, ATLANTIC STYLE	37
-	1	-	1	1	2119092-1	BOLT, ADJUSTMENT	35
-	7	7	7	7	1-18028-2	WASHER, FLAT, REG M4	33
-	2	2	2	2	2168083-9	SCR, SKT HD CAP, RoHS, M4 X 20	31
-	2	2	2	2	1-2168083-0	SCR, SKT HD CAP, RoHS, M4 X 10	29
-	1	1	1	1	240639-1	STRIPPER (MACHINING)	27
-	2	2	2	2	1320906-1	STUD, THREADED	25
-	1	1	1	1	1752371-5	PLATE, STRIP GUIDE	24
-	1	1	1	1	240825-1	PLATE, STRIP HOLD DOWN	23
-	2	2	2	2	2-22281-3	SPRING, COMPRESSION	22
-	1	1	1	1	1752373-4	DRAG	20
-	2	2	2	2	1901259-5	GUIDE, LOWER STRIP	18
-	4	4	4	4	1-2079383-1	SCR, BHSC, RoHS (M6 X 12)	17
-	1	1	1	1	6-240641-7	SPACER	16
-	1	1	1	1	240644-1	PLATE, REAR SHEAR	11
-	-	-	-	-	-	-	10
-	1	1	1	1	690482-1	PLATE, FRONT SHEAR	9
-	1	1	1	1	7-1803001-8	ANVIL, COMBINATION, END FEED	8
-	1	1	1	1	2217206-1	BLADE, SLUG	7
-	-	-	-	-	-	-	6
-	1	1	1	1	240641-9	SPACER	5
-	1	1	1	1	3-238009-6	BLOCK, FL CRIMPER SPACER	4
-	1	1	1	1	1-1803187-9	CRIMPER, INSULATION F	3
-	1	1	1	1	455888-5	SPACER, CRIMPER	2
-	1	1	1	1	6-1633713-4	CRIMPER, WIRE PREMIUM	1
-	77	-7	-6	-5	-2	PART NO	DESCRIPTION
-	-	-	-	-	-	-	ITEM NO

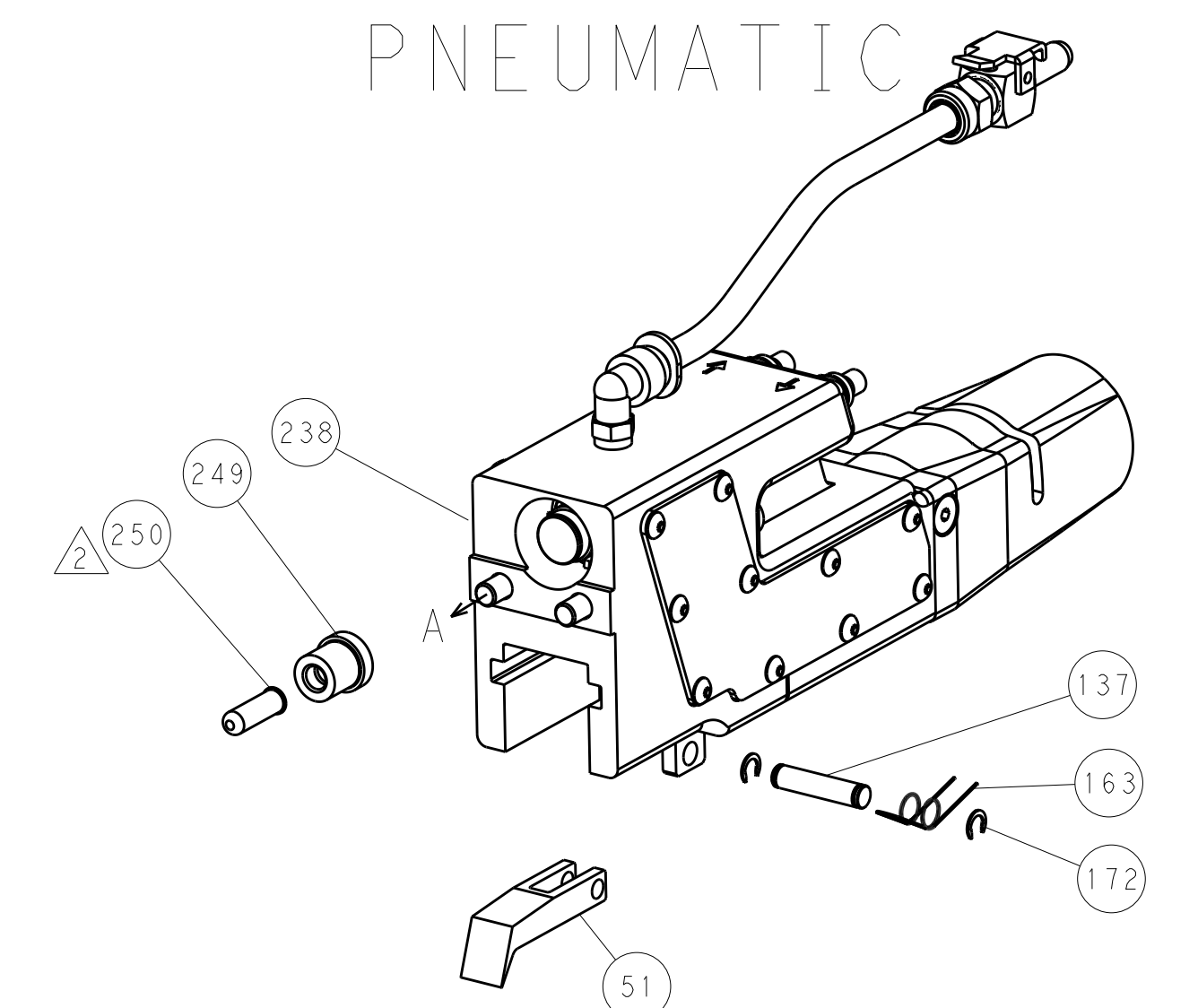
DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DWG		CHK		APVD		NAME	
mm		0 PLC ±.5 1 PLC ±.3 3 PLC ±.13 4 PLC ±.013 ANGLES ±.0001		J. HOU 13MAY2015		L. ZHANG 13MAY2015		H. GUO 13MAY2015		TE Connectivity Harrisburg, PA 17105-3608	
MATERIAL		FINISH		PRODUCT SPEC		APPLICATION SPEC		SIZE		RESTRICTED TO	
								A1 00779 C=2150510		Customer Accessible Production Drawing	
				WEIGHT		SCALE		SHEET		REV	
						1:1		1 OF 4		A	

LOC		DIST		REVISIONS			
A	66	P	LTN	DESCRIPTION	DATE	DMN	APVD
-	-	-	-	SEE SHEET 1	-	-	-

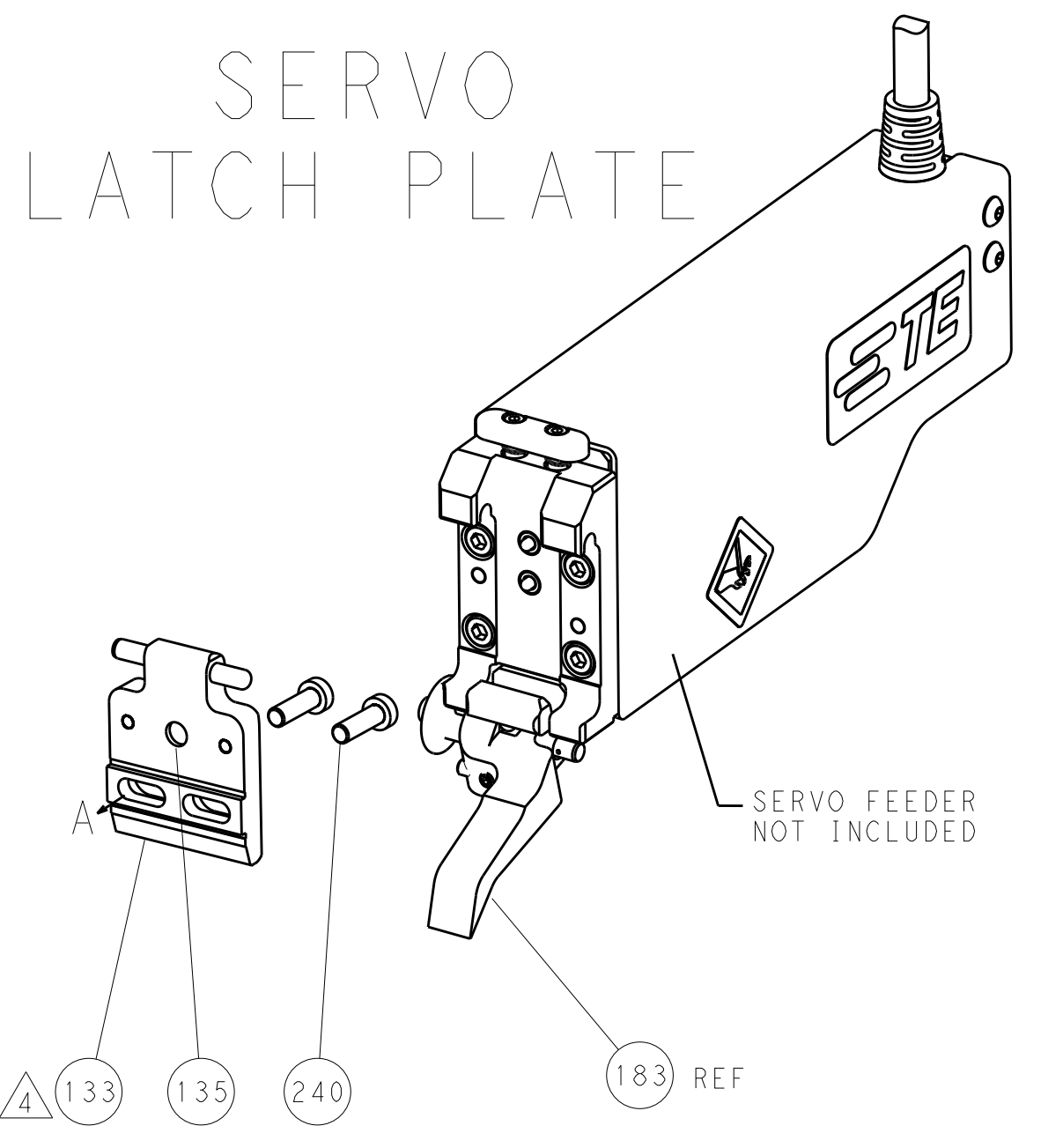


FEED TYPE

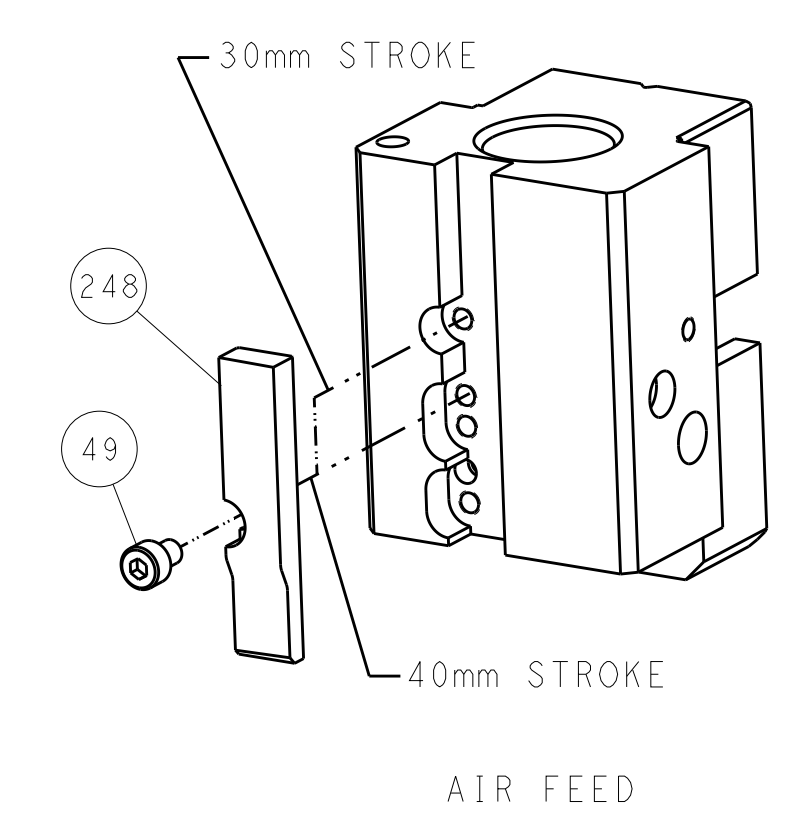
PNEUMATIC



SERVO LATCH PLATE



CAM POSITION



ATLANTIC VERSION
 Shown on sheets 1 of 4 & 2 of 4
 (Pacific version shown on sheets 3 of 4 & 4 of 4)

DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DWG: J. HOU 13MAY2015		TE Connectivity	
mm	0 PLC ±0.5	1 PLC ±0.5	2 PLC ±0.13	3 PLC ±0.013	4 PLC ±0.001	CHK: L. ZHANG 13MAY2015	Harrisburg, PA 17105-3608
MATERIAL:		FINISH:		APVD: H. GUO 13MAY2015		NAME: Ocean End Feed Applicator	
-		-		WEIGHT: -		SIZE: CAGE CODE: DRAWING NO: 00779 ©=2150510	
-		-		Customer Accessible Production Drawing		SCALE: 1:1 SHEET 2 OF 4 REV A	

PACIFIC VERSION TERMINATOR INTERFACE ADAPTER	PART NUMBER	REVISION	DESCRIPTION	FEED TYPE	APPLICATOR STYLE CONVERSION CHART						
					CONVERT TO	PART NUMBERS REQUIRED					
	2-2150510-2	A	FINE CRIMP HEIGHT ADJUST	PNEUMATIC	-	-	-	-	-	-	
	2-2150510-5	A	FINE CRIMP HEIGHT ADJUST	SERVO LATCH PLATE ⁴	SERVO LATCH PLATE	2119951-1	1901697-1	8-2150510-5	-	-	2168400-7 (QUANTITY 2)
					SMART APPLICATOR	2161326-1	-	8-2150510-4	-	-	-
	2-2150510-7	A	FINE CRIMP HEIGHT ADJUST	NONE	-	-	-	-	-	-	
7-2150510-7	A	CRIMP TOOLING KIT	-	-	-	-	-	-	-	-	

APPLICATOR DATA		
CRIMP	SIZE	TYPE
WIRE	2.59 mm [.102]	F
INSUL	3.40 mm [.134]	F
APPL INSTRUCTIONS 408-10390		

TERMINAL DATA: SAMSUNG TERMINAL SAMSUNG CRIMP SPECIFICATION
TERMINAL NAME: SAMSUNG TERMINAL
WIRE STRIP LENGTH INSULATION DIAMETER RANGE
TERMINAL APPLICATION SPECIFICATION SAMSUNG SPEC Rev - - -
TERMINALS APPLIED ¹⁰
TE TERMINAL SAMSUNG TERMINAL TE TERMINAL SAMSUNG TERMINAL
2113621-1 DB65-00305B

WIRE SIZE	CRIMP HEIGHT mm [INCH]	CRIMP HEIGHT REFERENCE SETTING ⁹
Ø1.0mm (Solid)	1.61+/-0.05 [.063+/- .002]	7.4



- ¹ RECOMMENDED SPARE PARTS
- ² GREASE BEARING SURFACES LIGHTLY
- 3. LUBRICATE DAILY PER THE APPLICATOR INSTRUCTION SHEET SUPPLIED WITH THE APPLICATOR.
- ⁴ APPLICATOR SPECIFIC DATA TO BE ENTERED INTO BLANK MEMORY CHIP AT ASSEMBLY. SEE BELOW FOR PART NUMBER:
 PNEUMATIC FEED WITH "SMART APPLICATOR" CONVERSION: 8-2150510-4
 SERVO FEED WITH "FINE CRIMP HEIGHT ADJUST": 8-2150510-5
- 5. ADJUSTMENT OF THE STRIPPER MAY BE REQUIRED WHEN MOVING THE APPLICATOR BETWEEN BENCH AND LEADMAKER APPLICATIONS.
- ⁶ APPLY PART NUMBER 1-23419-5 LOCTITE TO THREADS OF ITEMS 62.
 APPLY PART NUMBER 2-23419-6 LOCTITE TO THREADS OF ITEM 242.
- ⁷ GREASE THREADS, GROOVE AND O-RING ON ITEMS 139 & 153.
- ⁸ MAGNET, ITEM 166 MUST BE ORIENTED CORRECTLY IN ORDER TO PROPERLY ACTUATE THE COUNTER.
- ⁹ CRIMP HEIGHT REFERENCE SETTING WAS THE SETTING USED WHEN THE APPLICATOR WAS QUALIFIED AT THE FACTORY. ADJUSTMENT MAY BE NECESSARY WHEN RUNNING APPLICATOR IN THE FIELD.
- ¹⁰ TERMINAL PITCH NOT COMPATIBLE WITH MECHANICAL FEED.
- ¹¹ THE RECOMMENDED SET-UP FOR END FEED APPLICATORS IS POST-FEED WITH ITEM 2119653-1. THE APPLICATOR CAN BE CONFIGURED FOR PRE-FEED WITH ITEM 2119652-1 BUT MAY ENCOUNTER PROBLEMS WITH SOME APPLICATIONS. FEED ISSUES OR TERMINAL JAMMING MAY OCCUR IN THE PRE-FEED CONFIGURATION.
- 12. SAMSUNG TOOLING DRAWING 305B.

***WARNING**
 ON INSTALLATION, SET WIRE DISC, ITEM 40 TO LARGEST WIRE SIZE SETTING. USE OF SETTINGS BELOW MINIMUM REQUIRED CRIMP HEIGHT SETTING WILL CAUSE DAMAGE TO CRIMP TOOLING.

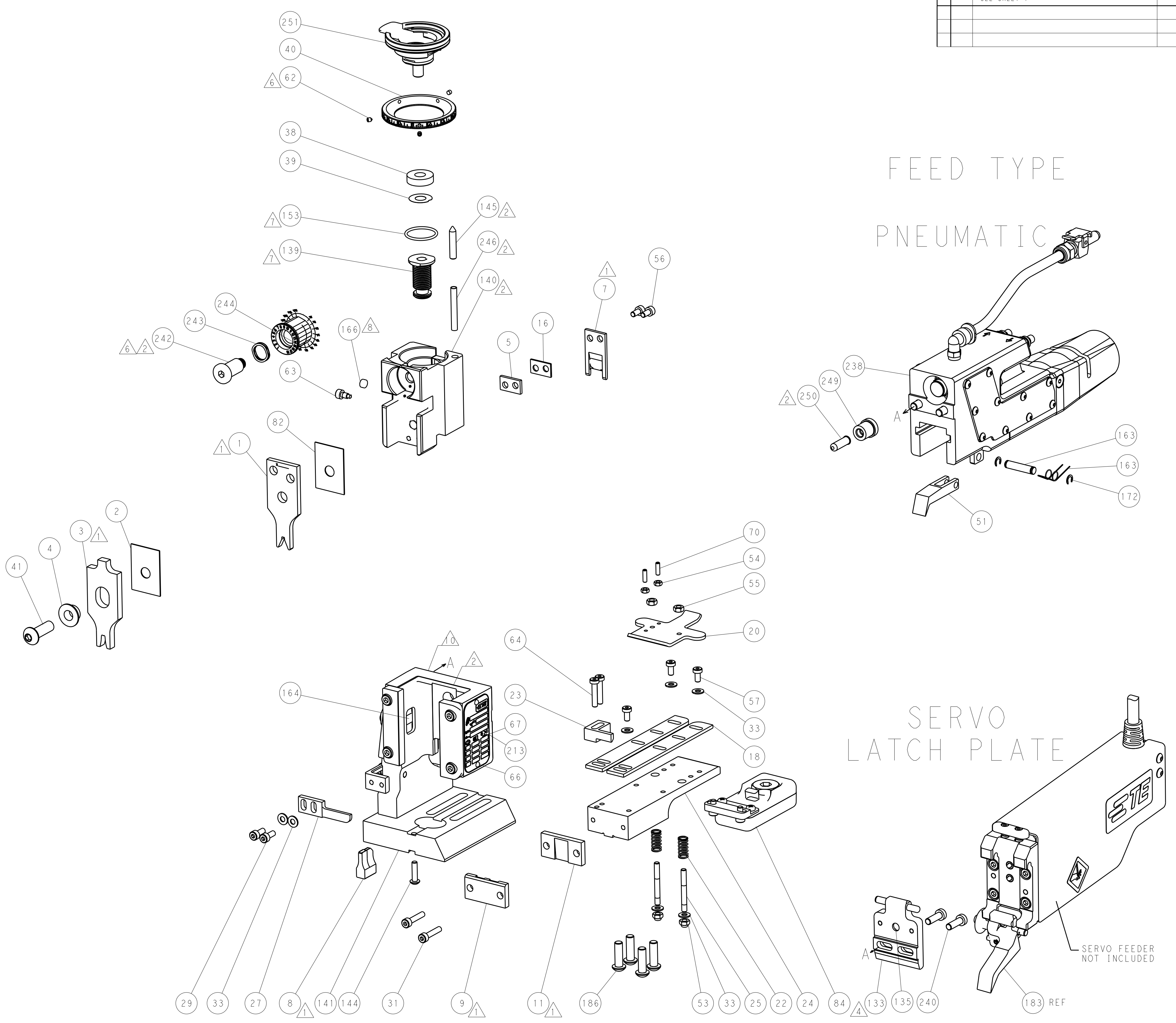
PACIFIC VERSION
 Shown on sheets 3 of 4 & 4 of 4
 (Atlantic version shown on sheets 1 of 4 & 2 of 4)

SET UP GAUGE	LOC	DIST	REVISIONS			
2119599-2	A	66	REV	DATE	BY	APPV
-	-	-	SEE SHEET 1	-	-	-

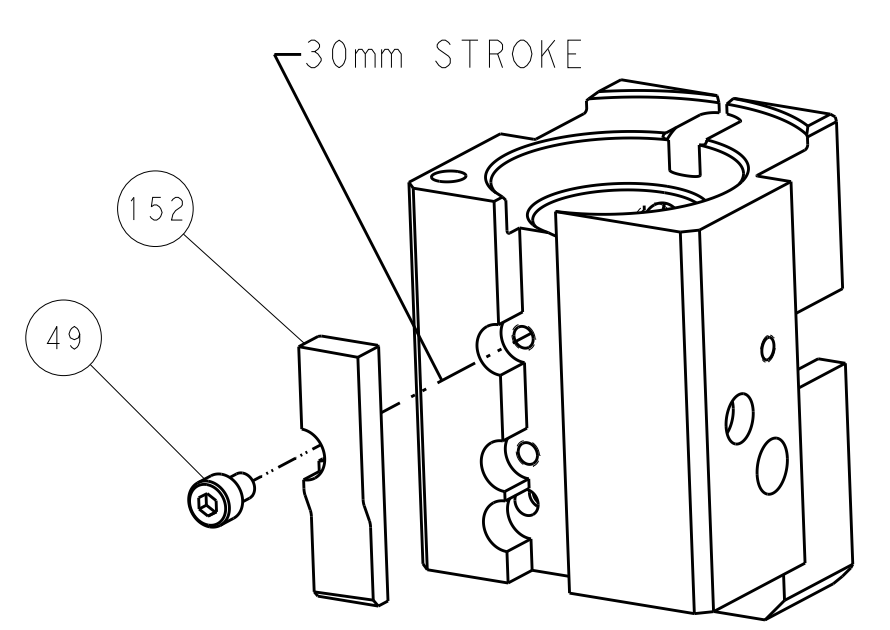
-	1	1	1	2119782-1	FINE ADJUST HEAD ASM, PACIFIC STYLE	251
-	-	-	1	2119640-1	PUSH ROD, AIR FEED	250
-	-	-	1	2079988-1	BUSHING, LCH5-12, MISUMI	249
-	1	1	1	1-22279-3	SPRING, COMPRESSION	246
-	1	1	1	2119082-4	CAM, SNAIL, INSULATION ADJUSTMENT	244
-	1	1	1	2079764-1	WASHER, WAVE SPRING, CREST-TO-CREST	243
⁶	-	1	1	2119083-1	RETAINER, INSULATION DIAL	242
-	-	2	-	2168400-7	SHCS, LOW HEAD, RoHS, M5 X 10	240
-	-	-	1	2063440-1	AIR FEED MODULE	238
-	-	1	-	2119740-2	TAG, IDENTIFICATION	213
-	4	4	4	2079383-9	SCR, BHSC, RoHS (M6 X 20)	186
-	-	REF	-	1901697-1	FEED FINGER ASSEMBLY, EF	183
-	-	-	2	21045-3	RING, RETAIN, EXTERN, 3/16 CRESCENT	172
-	1	1	1	994969-1	MAGNET, RARE EARTH HIGH ENERGY	166
-	REF	REF	REF	994970-2	COUNTER, MAGNETIC	164
-	-	-	1	240638-1	SPRING, FEED FINGER	163
-	1	1	1	8-21084-1	O-RING, .801 ID, .070 DIA. MAT.	153
-	-	-	1	2119641-2	FEED CAM, AIR FEED	152
-	1	1	1	2119798-2	DETENT PIN	145
-	1	1	1	2079383-8	SCR, BHSC, RoHS (M4 X 16)	144
-	-	-	-	2119653-2	FEED CAM, POST FEED	142
-	1	1	1	2119655-6	APPLICATOR BASIC ASSEMBLY, EF	141
-	1	1	1	2119651-1	RAM, ASIAN STYLE, END FEED	140
-	1	1	1	2119092-2	BOLT, ADJUSTMENT	139
-	-	-	1	3-23627-7	PIN, RETAIN, GRVD, 3/16 X .854	137
-	-	REF	-	SEE NOTE 4	MEMORY CHIP, PROGRAMMED	135
-	-	1	-	1633743-1	SERVO FEED LATCH ASM	133
-	1	1	1	2119955-2	ASSY, LUBRICATOR, END FEED	84
-	1	1	1	455888-5	SPACER, CRIMPER	82
-	1	1	1	2119956-2	DOCUMENTATION PACKAGE	71
-	2	2	2	2-18032-2	SCR, SET, FLT POINT M3 X 10.0	70
-	1	-	1	2119740-1	TAG, IDENTIFICATION	67
-	2	2	2	2168078-1	SCREW, DRIVE, RH, RoHS, 2 x .188	66
-	2	2	2	2168400-5	SHCS, LOW HEAD, RoHS, M4 X 20	64
-	1	1	1	2119793-1	LIMITER, ADJUSTMENT BOLT	63
⁶	-	3	3	992763-5	SCR, SET, SOC, CONE POINT, M3 x 4.0	62
-	3	3	3	2168400-4	SHCS, LOW HEAD, RoHS, M4 X 8	57
-	2	2	2	2168083-2	SCR, SKT HD CAP, RoHS, M4 X 8.0	56
-	2	2	2	5018030-2	NUT, HEX, REG, RoHS, M4	55
-	2	2	2	5018030-1	NUT, HEX, REG, RoHS, M3	54
-	2	2	2	986965-8	NUT, LOCK, HEX, TORQUE (M4)	53
-	-	-	1	2119792-2	PAWL, EF, AIR	51
-	-	-	1	18023-9	SCR, SKT HD CAP M4 X 6.0	49
-	1	1	1	2079383-7	SCR, BHSC, RoHS (M8 X 25)	41
-	1	1	1	2119645-1	DISC, NUMBERED FA WIRE ADJUSTMENT	40
-	1	1	1	2119957-1	APPLICATOR SHIM PACK	39
-	1	1	1	1-2119644-2	RAM WASHER, PRECISION	38
-	7	7	7	1-18028-2	WASHER, FLAT, REG M4	33
-	2	2	2	2168083-9	SCR, SKT HD CAP, RoHS, M4 X 20	31
-	2	2	2	1-2168083-0	SCR, SKT HD CAP, RoHS, M4 X 10	29
-	1	1	1	240639-1	STRIPPER (MACHINING)	27
-	2	2	2	1320906-1	STUD, THREADED	25
-	1	1	1	1752371-5	PLATE, STRIP GUIDE	24
-	1	1	1	240825-1	PLATE, STRIP HOLD DOWN	23
-	2	2	2	2-22281-3	SPRING, COMPRESSION	22
-	1	1	1	1752373-4	DRAG	20
-	2	2	2	1901259-5	GUIDE, LOWER STRIP	18
-	1	1	1	6-240641-7	SPACER	16
¹	-	1	1	240644-1	PLATE, REAR SHEAR	11
-	-	-	-	-	-	10
¹	-	1	1	690482-1	PLATE, FRONT SHEAR	9
¹	1	1	1	7-1803001-8	ANVIL, COMBINATION, END FEED	8
¹	-	1	1	2217206-1	BLADE, SLUG	7
-	-	-	-	-	-	6
-	1	1	1	240641-9	SPACER	5
-	1	1	1	3-238009-6	BLOCK, FL CRIMPER SPACER	4
¹	1	1	1	1-1803187-9	CRIMPER, INSULATION F	3
-	1	1	1	455888-5	SPACER, CRIMPER	2
¹	1	1	1	6-1633713-4	CRIMPER, WIRE PREMIUM	1

DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DATE	BY	APPV	NAME
mm	0 PLC ±.5	1 PLC ±.13	2 PLC ±.03	13MAY2015	J. HOU	L. ZHANG	TE Connectivity Harrisburg, PA 17105-3608
	3 PLC ±.013	4 PLC ±.0001	ANGLES ±.1	13MAY2015	J. GUO		Ocean End Feed Applicator
MATERIAL:	FINISH:	WEIGHT:	SCALE:	SIZE:	CAGE CODE:	DRAWING NO:	RESTRICTED TO:
			1:1	A1	00779	©=2150510	
Customer Accessible Production Drawing				SHEET 3 OF 4 REV A			

LOC		DIST		REVISIONS			
A	66	P	LTM	DESCRIPTION	DATE	DWN	APVD
		-		SEE SHEET 1			



CAM POSITION



AIR FEED

PACIFIC VERSION
 Shown on sheets 3 of 4 & 4 of 4
 (Atlantic version shown on sheets 1 of 4 & 2 of 4)

DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DWN: J. HOU 13MAY2015		STE TE Connectivity Harrisburg, PA 17105-3608	
mm	0 PLC ±0.5	1 PLC ±0.5	2 PLC ±0.13	3 PLC ±0.013	4 PLC ±0.001	APVD: L. ZHANG 13MAY2015	NAME: Ocean End Feed Applicator
	ANGLES ±0.001					PRODUCT SPEC	
MATERIAL:	FINISH:	WEIGHT:	SCALE: 1:1	SHEET: 4	OF: 4	REV: A	RESTRICTED TO: