



Product/Process Change Notification

PCN Number:	100035-A	Product Category:	Inking Hardware	Issue Date:	24-Nov-2021
Contact:	Inside Sales	E-Mail: insidesales@xandex.com			
	1360 Redwood Way, Suite A	Phone: 707-763-7799			
	Petaluma, CA 94954	Fax: 707-763-2631			
Description of Change to Customer:					
Improved Inker accuracy: increased thread pitch of z adjust and replacement of shuttle mechanism.					
Reason For Change:					
As dot size requirements decrease, improved dot placement accuracy and repeatability are required to maintain dot placement requirements.					
Customer Impact of Change and Recommended Action:					
There are some form changes - customers should confirm that there are no fit issues with their unique installations. Review the index of dimensional drawings listed in Appendix - the relevant revisions are attached.					
Forecasted Key Milestones: Subject to change based on business conditions					Date:
Complete Internal Qualification Testing					TBD
Samples Available To Order					TBD
First Shipment of Changed Product (as early as)					1-Mar-22
Last Shipment of Unchanged Product (subject to material availability)					28-Feb-22
Method of Identifying Changed Product:					
Assembly revision listed on label; existing products do not include an assembly label. Refer to drawings in Appendix for proper product revision level.					
Assessment:					
Form and function. See dimensional drawings for Form differences. Function change is improved Z adjust resolution.					
Products and Xandex Part Numbers Affected					
Pneumatic Inker Bases and Pneumatic Shuttles used in Inker Sets. Includes New Retrofit Kits to accommodate mounting new shuttles on existing inker bases, and New Shuttle Maintenance Kit for new shuttle design. See Appendix for complete product list.					
Revision History					
Date of Revision:	Revision Letter:	Reason:			
24-Nov-2021	A	Initial publication			

Please contact your Xandex sales representative for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.

PCN 10035 Appendix: Qualification Testing

Test	Result
Functional	TBD
Application	TBD
Reliability	TBD



Product/Process Change Notification
Appendix: Parts & Sets affected by PCN 100035

Product	Current Product		Improved Product		Dimensional Drawing		Comments
	Part Number	Revision	Part Number	Revision	Document Number	Revision	
SET - INKER X1100	340-1100	P	340-1100	S	900-0221	1	
INKER BASE 1100	320-1100	K	320-1100	L	900-0221	1	
SET-INKER X1412 TSK APM90	340-1412	K	340-1412	L	900-0222	1	
INKER BASE 1412 TSK APM90	320-1412	D	320-1412	L	900-0222	1	
SET-INKER X1410 TSK APM90	340-1410	K	340-1410	L	900-0223	1	
SET INKER KIT X1413 RA	340-1413	A	340-1413	B	900-0223	1	
SM SET-INKER X4115 EG MOTO Z DETENT	340-4115	G	340-4115	H	900-0224	1	
SET-INKER X4116 MOTO Z DETENT NO PUFF	340-4116	F	340-4116	G	900-0224	1	
SET-INKER X4215 KLA MOTOR Z DETENT	340-4215	G	340-4215	H	900-0226	1	
SM SET-CSP INKER X4216 KLA MOTOR Z DETENT	340-4216	2	340-4216	3	900-0226	1	
SM SET-INKER X4217 KLA MOTOR Z DETENT NO PUFF	340-4217	D	340-4217	E	900-0226	1	
SM SET-INKER X4218 P8 MOTOR Z DETENT	340-4218	A	340-4218	B	TBD	TBD	Not available at this time
INKER ASSY MOTOR Z DETENT	320-4215	C	320-4215	D	900-0226	1	
PNEU SHUTTLE 36IN AIR HOSE	316-0001	N	316-0010	A	900-0219	1	
PNEUMATIC SHUTTLE OVERHEAD	216-0001	J	316-0011	A	900-0220	1	See NOTE 1
PNEUMATIC SHTL OVERHEAD SWIVEL	216-0003	E	316-0011	A	900-0220	1	See NOTE 2
SHUTTLE ASSY SHORT STROKE	216-0005	F	316-0011	A	900-0220	1	See NOTE 3

This PM Kit is used for Maintenance of the Improved Shuttle

KIT, PM, SHUTTLE	NOT APPLICABLE	370-0006	A	NOT APPLICABLE	For improved shuttle only
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These PM Kits will continue to be available to maintain your existing Shuttles

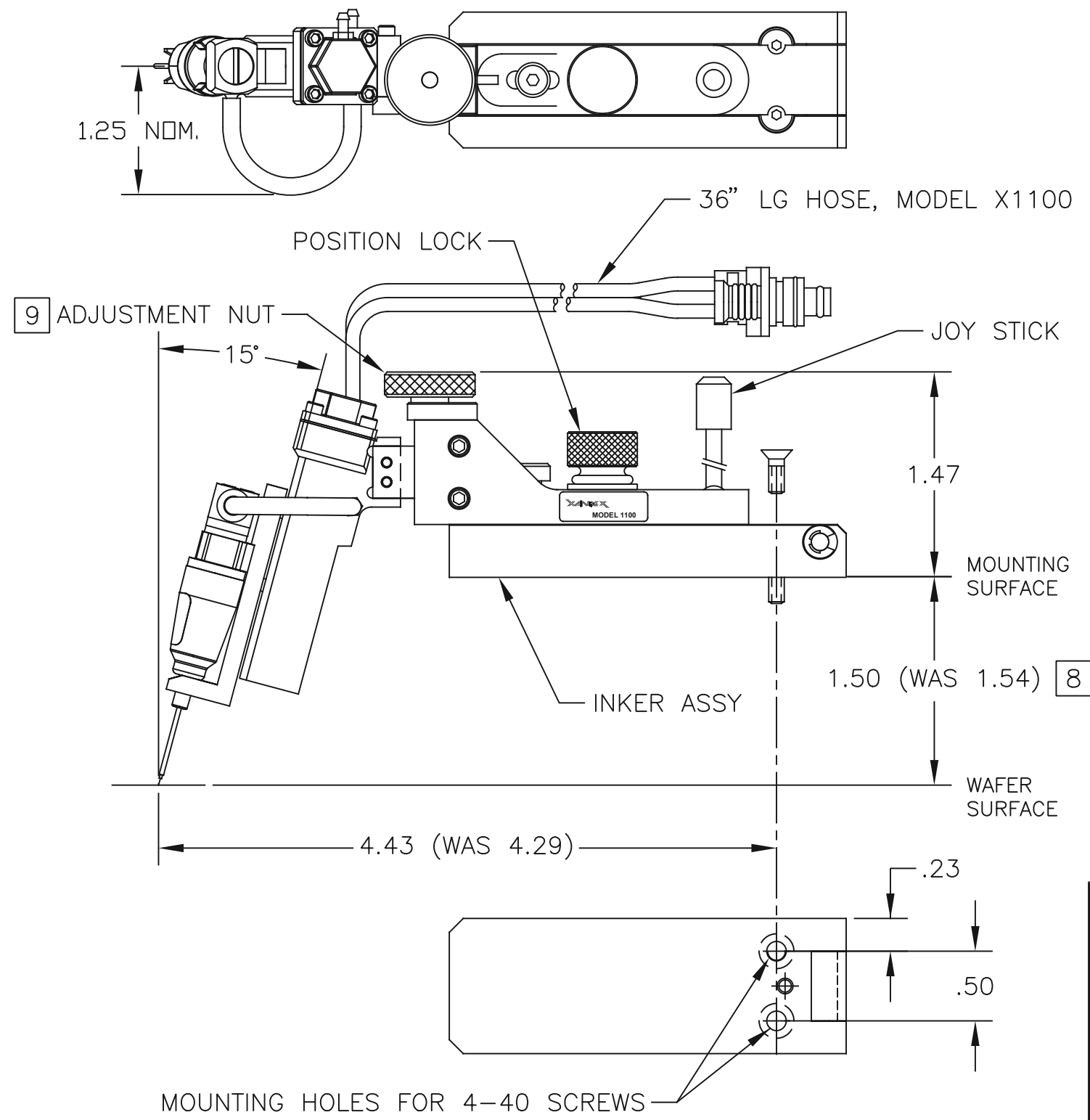
KIT, PM, OVERHEAD SHUTTLE	370-0001	C	NOT APPLICABLE	For existing products only
KIT, PM, SHUTTLE	370-0002	D		For existing products only

NOTES:

1. To install the improved shuttle on a current inker base using 216-0001 requires a one time purchase and installation of Retrofit Kit 355-1122
2. To install the improved shuttle on a current inker base using 216-0003 requires a one time purchase and installation of Retrofit Kit 355-1120
3. To install the improved shuttle on a current inker base using 216-0005 requires a one time purchase and installation of Retrofit Kit 355-1121


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REVISIONS					
REV	DESCRIPTION	CHANGE NUMBER	BY	DATE	APPROVED
1	PRE-RELEASE	4526	MRW	11/19/21	



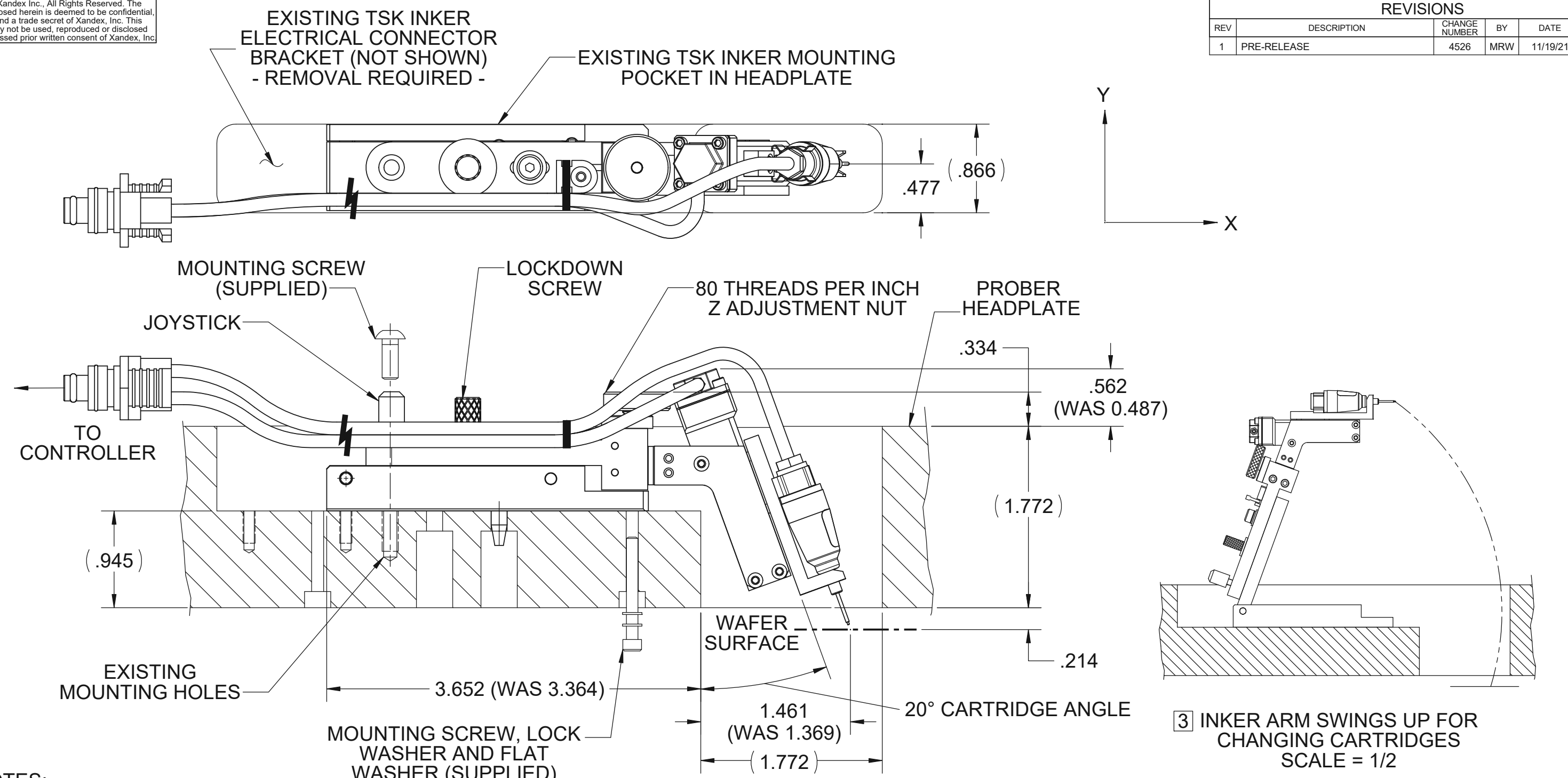
NOTES:

1. INKER FOR ELECTROGLAS PROBER, OFF LINE OR CABLED PROBING.
2. THIS INKER USES THE DM-2 CARTRIDGE ONLY.
3. INKER ARM IS ADJUSTABLE ALONG THE "Z" AXIS BY $\pm .188$.
4. JOYSTICK PROVIDES "X" AND "Y" AXIS MOVEMENT AT THE TIP OF THE CARTRIDGE NEEDLE.
5. ALL DIMENSIONS SHOWN WITH ADJUSTMENTS IN NEUTRAL POSITION.
6. INKER MOUNTS TO THE PROBER USING (2) 4-40 X 5/16 FLAT HEAD SCREWS (SUPPLIED).
7. ORDER SET NUMBER 340-1100, FOR MAGNETIC SWING ARM TO BASE RETENTION. ORDER SET NUMBER 340-1105 FOR DETENT SWING ARM TO BASE RETENTION.
8. THE 1.54 TO 1.50 SHIFT CAN BE RESOLVED IN INKER BASE Z-ADJUSTMENT.
9. Z-ADJUST RESOLUTION IS 80 THREADS PER INCH.
10. THE WEIGHT OF THE ASSEMBLY HAS INCREASED 8 GRAMS.

APPROVALS	DATE	ITEM	QTY	PART NUMBER	DESCRIPTION
DRAWN MRW	11/10/21			INTERPRET DRAWING PER ASME Y14.5M-1982	 1360 REDWOOD WAY, SUITE A PETALUMA, CA 94954 (707) 763 7799
CHECKED				TOLERANCES UNLESS OTHERWISE SPECIFIED	
ENGRG J.THOMAS	11/10/21			DIMENSIONS ARE IN INCHES DECIMALS	
NEXT ASSEMBLIES.....USED ON					TITLE
340-1100					OD DWG PNEU INKR
340-1101					X1100 SERIES
DO NOT SCALE DRAWING					
SIZE	SCALE	SHEET	DRAWING NUMBER		REV
B	1/1	1 OF 1	900-0221		1

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REV	DESCRIPTION	CHANGE NUMBER	BY	DATE	APPROVED
1	PRE-RELEASE	4526	MRW	11/19/21	



NOTES:

1. INKER IS DESIGNED FOR USE ON TSK-APM-90 PROBERS, AND REPLACES EXISTING TSK INKER. TSK INKER AND CONNECTOR BRACKET MUST BE REMOVED TO INSTALL XANDEX INKER.
2. THIS INKER IS DESIGNED TO WORK WITH DM-2.3 CARTRIDGES ONLY.
3. FROM NEUTRAL POSITION, Z TRAVEL $\pm .110$, X TRAVEL $\pm .125$, Y TRAVEL $\pm .190$ AT THE CARTRIDGE TIP. INKER ARM SWING FOR CARTRIDGE CHANGE MAY REQUIRE JOYSTICK POSITIONING AWAY FROM NEUTRAL.
4. ORDER INKER SET X1412, PART NUMBER 340-1412.
5. THE WEIGHT OF THE ASSEMBLY HAS INCREASED 8 GRAMS.

APPROVALS	DATE	INTERPRET DRAWING PER ASME Y14.5M-1994
DRAWN MRW	11/10/2021	
CHECKED		TOLERANCES
ENGRG J.THOMAS	11/10/2021	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
NEXT ASSEMBLIES.....USED ON		DECIMALS 1 PL \pm 2 PL \pm 3 PL \pm
THIRD ANGLE PROJECTION		FRACTIONS \pm ANGLES \pm <input checked="" type="checkbox"/> ALL SURFACES

XANDEX INC. 1360 REDWOOD WAY, SUITE A
PETALUMA, CA 94954
(707) 763-7799

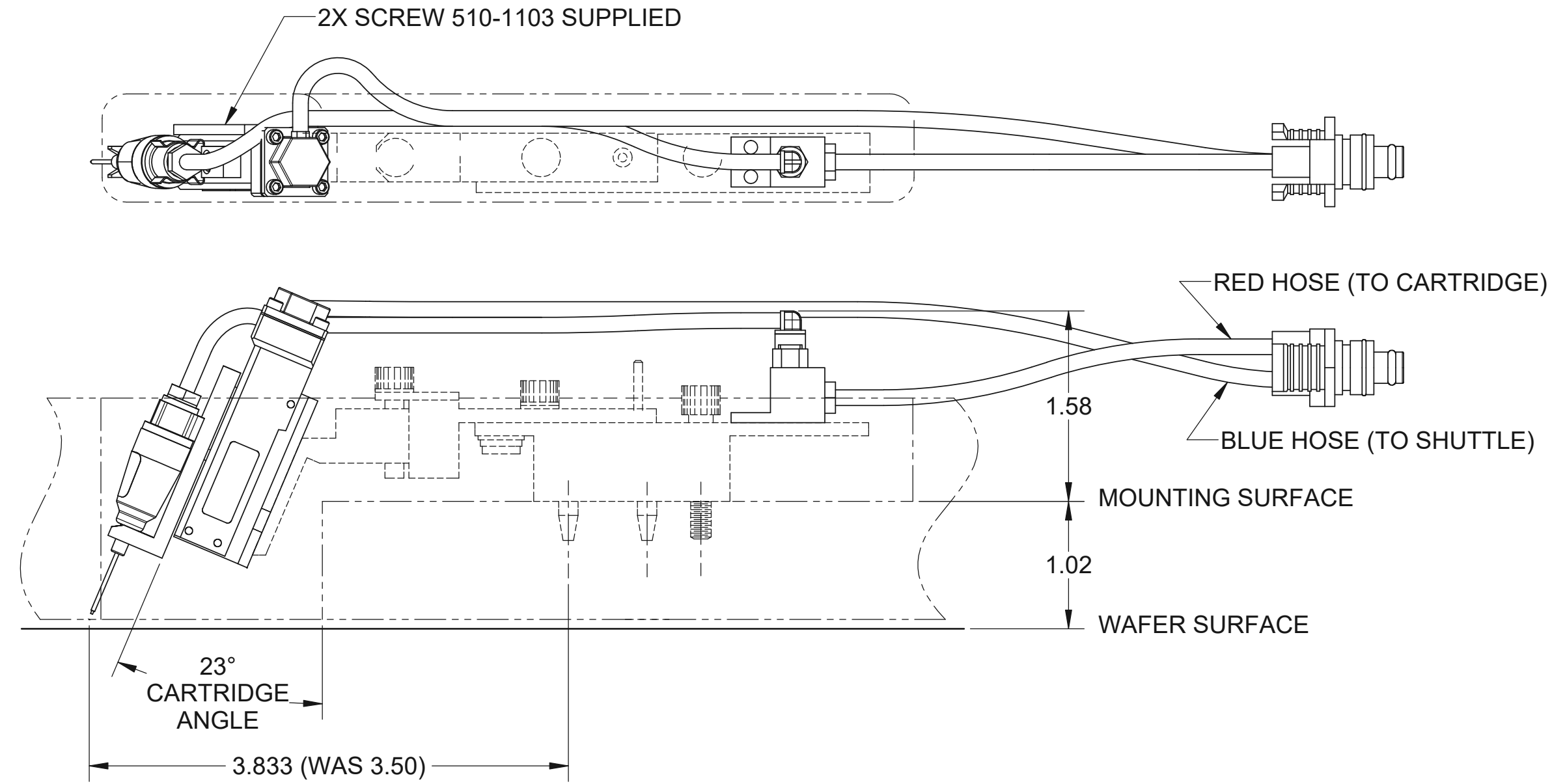
TITLE
OD DWG PNEU INKR X1412

DO NOT SCALE DRAWING

SIZE B	SCALE 1:1	SHEET 1 of 1	DRAWING NUMBER 900-0222	REV 1
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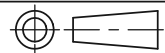
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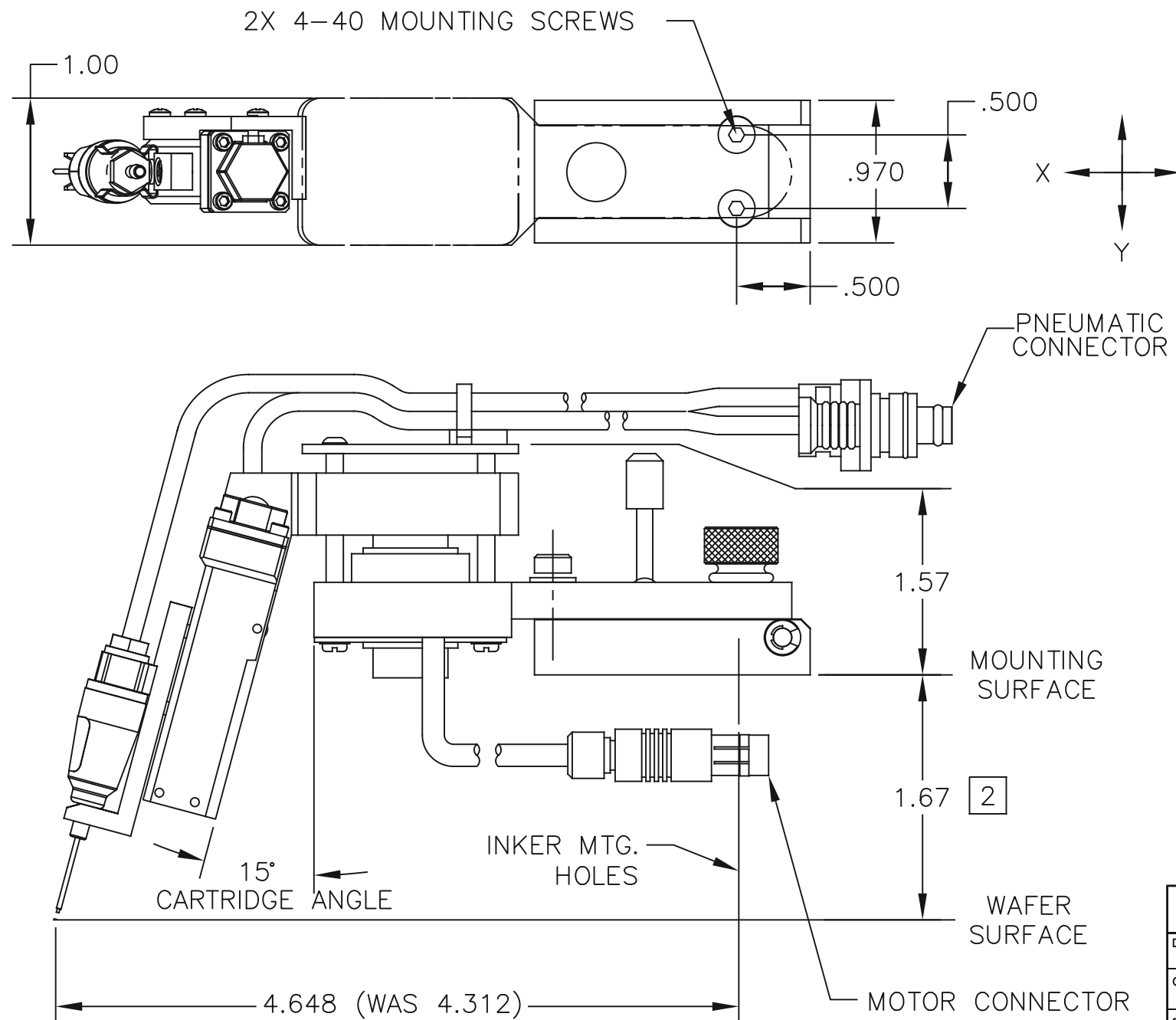
NOTES:

1. INKER IS DESIGNED FOR USE ON TSK-APM90 PROBERS.
2. INKER RETRO-FITS TO EXISTING TSK INKER OR AS AN OEM PNEUMATIC INKING OPTION.
3. INKER USES THE DM-2 CARTRIDGE ONLY.
4. DIMENSIONS SHOWN IN NEUTRAL POSITION, REFERENCE ONLY.
5. ORDER INKER SET X1410 PART NUMBER 340-1410 FOR STRAIGHT CONTROLLER POWER SUPPLY CONNECTOR.
6. ORDER INKER SET X1413 PART NUMBER 340-1413 FOR RIGHT ANGLE CONTROLLER POWER SUPPLY CONNECTOR.
7. THE WEIGHT OF THE ASSEMBLY HAS INCREASED 8 GRAMS.

APPROVALS	DATE	INTERPRET DRAWING PER ASME Y14.5M-1994	 1360 REDWOOD WAY, SUITE A PETALUMA, CA 94954 (707) 763-7799
DRAWN MRW	11/10/2021		
CHECKED		TOLERANCES	TITLE OD DWG PNEU X1410/X1413
ENGRG K.PEEBLES	11/10/2021	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
NEXT ASSEMBLIES.....USED ON		DECIMALS 1 PL ±.1 2 PL ±.01 3 PL ±.005	FRACTIONS ± ANGLES ± 1° 63/ ALL SURFACES
 THIRD ANGLE PROJECTION		DO NOT SCALE DRAWING	
SIZE B	SCALE 1:1	SHEET 1 OF 1	DRAWING NUMBER 900-0223
			REV 1


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1	PRE-RELEASE	4526	MRW	11/19/21	



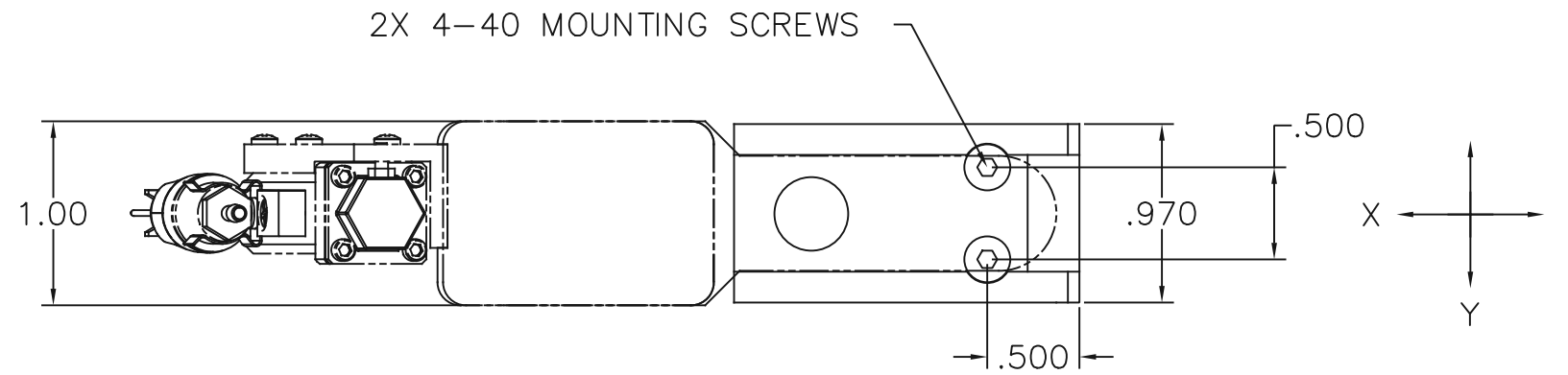
NOTES:

1. IN FACTORY SETTING, SHUTTLE TRAVELS .050 FROM POSITION SHOWN TO DEPOSIT INK ON WAFER. SHUTTLE TRAVEL IS USER ADJUSTABLE FROM 0 TO .050 INCHES.
2. INKER HAS VERTICAL (Z) ADJUSTMENT CAPABILITY OF $\pm .18$ IN INCREMENTS OF .0005, FROM NOMINAL POSITION SHOWN.
3. INKER USES "JOYSTICK" FOR X AND Y POSITIONING.
4. INKER USES DM-2 TYPE INK CARTRIDGES.
5. INKER MOUNTS TO EG PROBER USING (2) 4-40 X 3/8 LONG FLAT HEAD SOCKET SCREWS (SUPPLIED).
6. FOR EG PROBERS,
 ORDER SET 340-4115 FOR STANDARD CONTROLLER SOFTWARE
 ORDER SET 340-4116 FOR "NO PUFF" CONTROLLER SOFTWARE MODIFICATION.
7. THE WEIGHT OF THE ASSEMBLY HAS INCREASED 8 GRAMS.

APPROVALS	DATE	ITEM	QTY	PART NUMBER	DESCRIPTION
DRAWN MRW	11/10/21	INTERPRET DRAWING PER ASME Y14.5M-1982			 1360 REDWOOD WAY, SUITE A PETALUMA, CA 94954 (707) 763 7799
CHECKED		TOLERANCES UNLESS OTHERWISE SPECIFIED			
ENGRG J.THOMAS	11/10/21	DIMENSIONS ARE IN INCHES DECIMALS			TITLE
NEXT ASSEMBLIES.....USED ON					OD DWG MOTR Z INKR X4115
					DO NOT SCALE DRAWING
		1 PL \pm	FRACTIONS \pm		SIZE
		2 PL $\pm .010$	ANGLES $\pm 1^\circ$		SCALE
		3 PL $\pm .005$	63 \sqrt ALL SURFACES		SHEET
		4 PL \pm			DRAWING NUMBER
					REV
					B
					1/1
					1 OF 1
					900-0224
					1

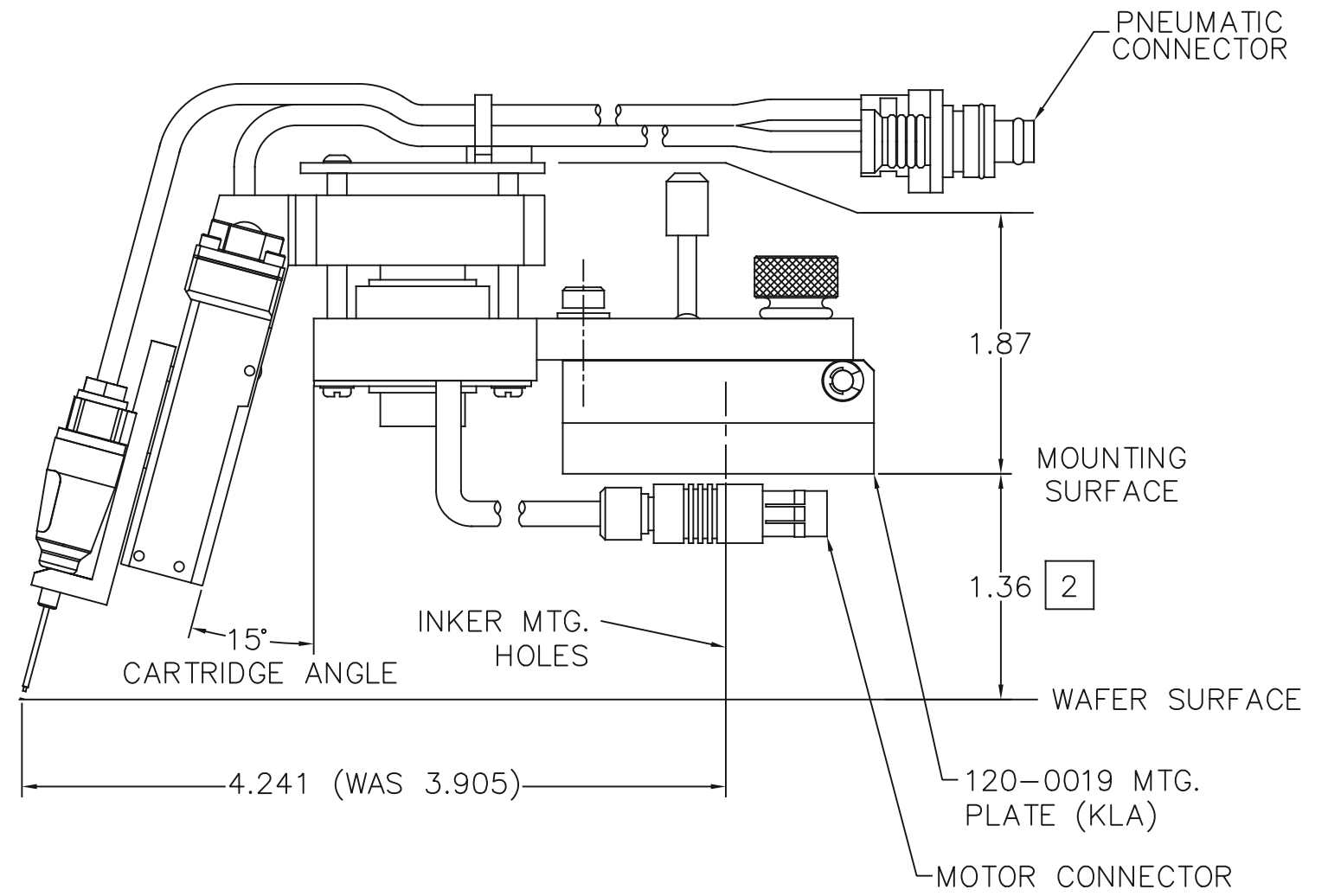
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REV	DESCRIPTION	CHANGE NUMBER	BY	DATE	APPROVED
1	PRE-RELEASE	4526	MRW	11/19/21	



NOTES:

1. IN FACTORY SETTING, SHUTTLE TRAVELS .050 FROM POSITION SHOWN TO DEPOSIT INK ON WAFER. SHUTTLE TRAVEL IS USER ADJUSTABLE FROM 0 TO .050 INCHES.
2. INKER HAS VERTICAL (Z) ADJUSTMENT CAPABILITY OF $\pm .18$ IN INCREMENTS OF .0005, FROM NOMINAL POSITION SHOWN.
3. INKER USES "JOYSTICK" FOR X AND Y POSITIONING.
4. INKER USES DM-2 TYPE INK CARTRIDGES.
5. FOR KLA PROBERS: INSTALL INKER MOUNTING PLATE (120-0019) TO PROBER USING (2) M3.5 X 6MM LONG PAN HEAD SCREWS (SUPPLIED). INKER ASSEMBLES TO MOUNTING PLATE USING (2) 4-40 X 1/4 LONG FLAT HEAD SCREWS (SUPPLIED).
6. FOR KLA PROBERS, ORDER SET X4215 PART NUMBER 340-4215 FOR STANDARD CONTROLLER SOFTWARE
 ORDER SET X4217 PART NUMBER 340-4217 FOR "NO PUFF" CONTROLLER SOFTWARE MODIFICATION.
7. THE WEIGHT OF THE ASSEMBLY HAS INCREASED 8 GRAMS.



APPROVALS	DATE	ITEM	QTY	PART NUMBER	DESCRIPTION
DRAWN MRW	11/11/21	INTERPRET DRAWING PER ASME Y14.5M-1994			1360 REDWOOD WAY, SUITE A PETALUMA, CA 94954 (707) 763 7799
CHECKED		TOLERANCES UNLESS OTHERWISE SPECIFIED			
ENGRG J.THOMAS	11/11/21	DIMENSIONS ARE IN INCHES DECIMALS			
NEXT ASSEMBLIES.....USED ON		1 PL ± FRACTIONS ± 2 PL ±.010 ANGLES ±1° 3 PL ±.005 63° ALL SURFACES 4 PL ±			TITLE OD DWG MOTR Z INKR X4215/X4217 DO NOT SCALE DRAWING
SIZE D	SCALE 2/1	SHEET 1 of 2	DRAWING NUMBER 900-0226		REV 1

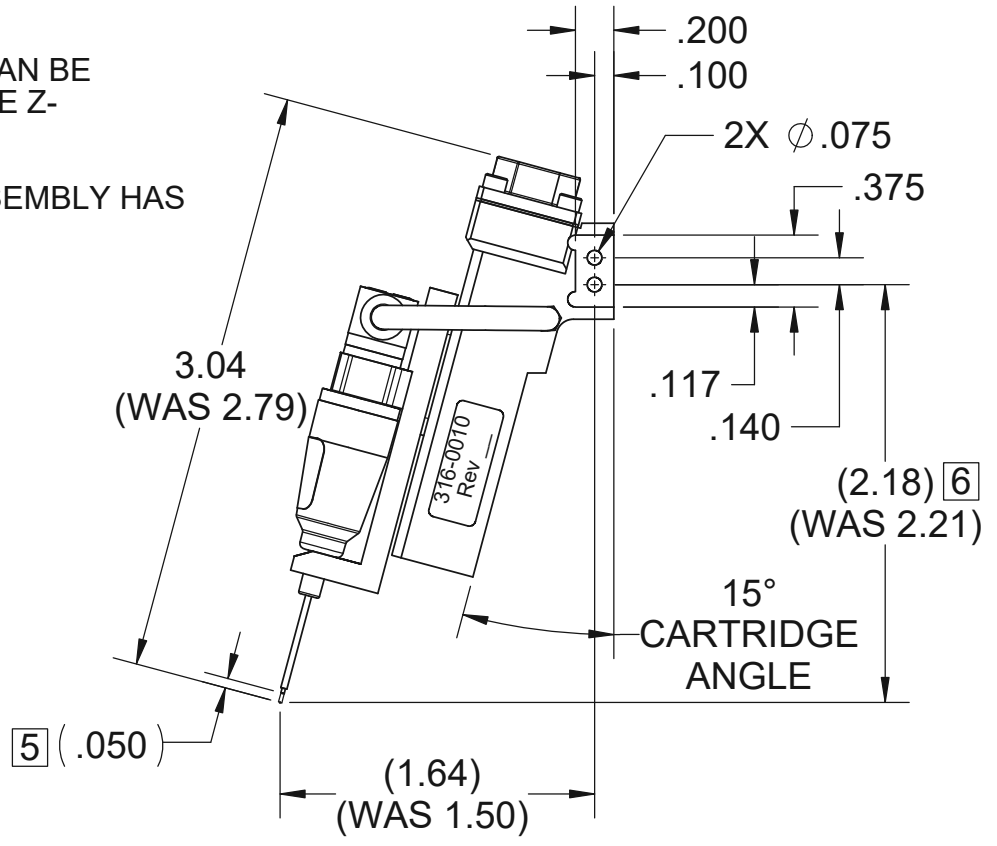
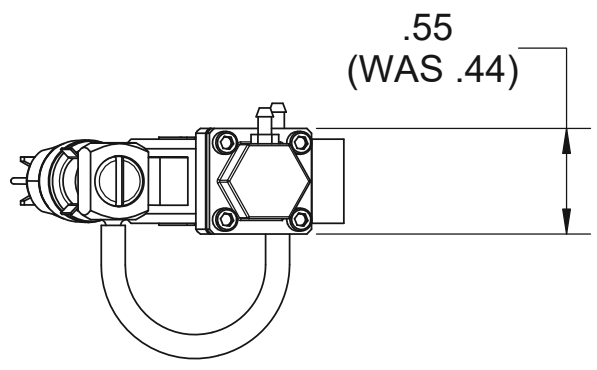
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REV	DESCRIPTION	CHANGE NUMBER	BY	DATE	APPROVED
1	INITIAL RELEASE	4526	MRW	11/19/21	

NOTES:

- SHUTTLE ASSEMBLY PART NUMBER IS 316-0010.
- DIMENSIONS SHOWN REPRESENT THE SHUTTLE WITH A DM-2 CARTRIDGE INSTALLED.
- ALL DIMENSIONS SHOWN IN EXTENDED POSITION AS IT DEPOSITS INK ON THE WAFER.
- SHUTTLE MOUNTS USING (2) 1-72 SOCKET HEAD CAP SCREWS.
- SHUTTLE TRAVELS APPROXIMATELY .050 FROM RETRACTED POSITION TO DEPOSIT INK ONTO THE WAFER SURFACE.
- THE 2.18 TO 2.21 SHIFT CAN BE RESOLVED IN INKER BASE Z-ADJUSTMENT.
- THE WEIGHT OF THE ASSEMBLY HAS INCREASED 8 GRAMS.



APPROVALS	DATE
DRAWN MRW	11/2/2021
CHECKED	
ENGRG J.THOMAS	11/2/2021
NEXT ASSEMBLIES.....USED ON	

INTERPRET DRAWING PER ASME Y14.5M-1994

TOLERANCES
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMALS
1 PL ±.1
2 PL ±.01
3 PL ±.005

FRACTIONS ±
ANGLES ± 1°

63 ALL SURFACES

XANDEX INC. 1360 REDWOOD WAY, SUITE A
PETALUMA, CA 94954 (707) 763-7799

TITLE
OD DWG PREC PNEU SHUTTLE - X1100 SERIES

DO NOT SCALE DRAWING

SIZE A	SCALE 1:1	SHEET 1 OF 1	DRAWING NUMBER 900-0219	REV 1
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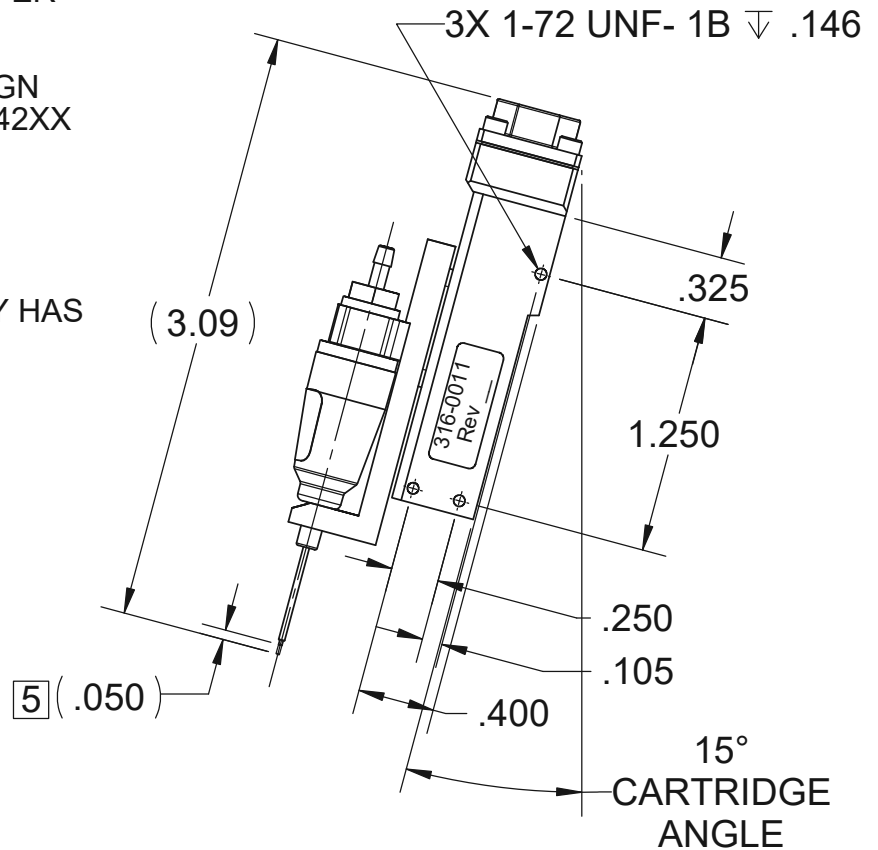
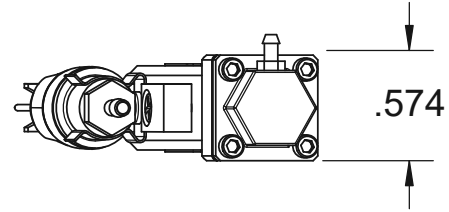
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REV	DESCRIPTION	CHANGE NUMBER	BY	DATE	APPROVED
1	PRE- RELEASE	4526	MRW	11/19/21	

NOTES:

- SHUTTLE ASSEMBLY PART NUMBER IS 316-0011.
- DIMENSIONS SHOWN REPRESENT THE SHUTTLE WITH A DM-2 CARTRIDGE INSTALLED.
- ALL DIMENSIONS SHOWN IN SHUTTLE EXTENDED POSITION AS IT DEPOSITS INK ON THE WAFER.
- SHUTTLE MOUNTS USING (2) 1-72 SOCKET HEAD CAP SCREWS.
- SHUTTLE TRAVELS APPROXIMATELY .050 FROM RETRACTED POSITION TO DEPOSIT INK ONTO THE WAFER SURFACE.
- TO MOUNT THIS SHUTTLE DESIGN ON EXISTING X14XX, X41XX & X42XX INKER BASES A NEW SHUTTLE MOUNTING ARM IS REQUIRED. CONSULT XANDEX CUSTOMER SERVICE.
- THE WEIGHT OF THE ASSEMBLY HAS INCREASED 8 GRAMS.



APPROVALS	DATE
DRAWN MRW	11/2/2021
CHECKED	
ENGRG J.THOMAS	11/2/2021
NEXT ASSEMBLIES.....USED ON	

INTERPRET DRAWING PER ASME Y14.5M-1994

TOLERANCES UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DECIMALS 1 PL ±.1
2 PL ±.01
3 PL ±.005

FRACTIONS ±
ANGLES ± 1°

63 ALL SURFACES

XANDEX INC. 1360 REDWOOD WAY, SUITE A
PETALUMA, CA 94954
(707) 763-7799

TITLE
OD DWG PREC PNEU SHUTTLE

DO NOT SCALE DRAWING

SIZE A	SCALE 1:1	SHEET 1 OF 1	DRAWING NUMBER 900-0220	REV 1
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