



**Picoflex® Fixture
For Arbor Press
Specification Sheet
Order No. 69020-1902**



FEATURES

- % This fixture is used to terminate pre-cut ribbon cable into the 90327 and 90584 series Picoflex connectors (loose piece connectors only) 4 - 26 circuits.
- % This fixture can only be used in a standard Euro Arbor Press Order No. 69020-0660.
- % Electrical and pneumatic power supply is not required.
- % This fixture is designed for medium to low volume production. Small batch production is ideal.
- % The fixture is 155mm (6.10") by 110mm (4.33") by 90mm (3.54") and weights 1.0 kg (2.20 lbs).

SCOPE

Products: 1.27mm (.050") Pitch Picoflex® PF-50, Low Profile, IDT Receptacle Series 90327, 4 to 26 Circuits.
1.27mm (.050") Pitch Picoflex® PF-50 IDT Receptacle, Low Profile, Board-In, Series 90584, 4 to 26 Circuits.

Series No.	Circuit Size	Connector Order Number				
90327	4	90327-0304	90327-0351	90327-0352	90327-0353	90327-0354
		90327-3304	90327-3351	90327-3352	90327-3353	90327-3354
	6	90327-0306	90327-0355	90327-0356	90327-0357	90327-0358
		90327-3306	90327-3355	90327-3356	90327-3357	90327-3358
	8	90327-0308	90327-0359	90327-0360	90327-0361	90327-0362
		90327-3308	90327-3359	90327-3360	90327-3361	90327-3362
	10	90327-0310	90327-0363	90327-0364	90327-0365	90327-0366
		90327-3310	90327-3363	90327-3364	90327-3365	90327-3366
	12	90327-0312	90327-0367	90327-0368	90327-0369	90327-0370
		90327-3312	90327-3367	90327-3368	90327-3369	90327-3370
	14	90327-0314	90327-0371	90327-0372	90327-0373	90327-0374
		90327-3314	90327-3371	90327-3372	90327-3373	90327-3374
	16	90327-0316	90327-0375	90327-0376	90327-0377	90327-0378
		90327-3316	90327-3375	90327-3376	90327-3377	90327-3378
	18	90327-0318	90327-0379	90327-0380	90327-0381	90327-0382
		90327-3318	90327-3379	90327-3380	90327-3381	90327-3382
	20	90327-0320	90327-0383	90327-0384	90327-0385	90327-0386
		90327-3320	90327-3383	90327-3384	90327-3385	90327-3386
	22	90327-0322	90327-0391	90327-0392	90327-0393	90327-0394
		90327-3322	90327-3391	90327-3392	90327-3393	90327-3394
	24	90327-0324	90327-0395	90327-0396	90327-0397	90327-0398
		90327-3324	90327-3395	90327-3396	90327-3397	90327-3398
	26	90327-0326	90327-0387	90327-0388	90327-0389	90327-0390
		90327-3326	90327-3387	90327-3388	90327-3389	90327-3390
90584	4	90584-1304	90584-1404	90584-2304	90584-2404	90584-9304
		90584-9404				
	6	90584-1306	90584-1406	90584-2306	90584-2406	90584-9306
		90584-9406				
	8	90584-1308	90584-1408	90584-2308	90584-2408	90584-9308
		90584-9408				

Series No.	Circuit Size	Connector Order Number				
90584	10	90584-1310	90584-1410	90584-2310	90584-2410	90584-9310
		90584-9410				
	12	90584-1312	90584-1412	90584-2312	90584-2412	90584-9312
		90584-9412				
	14	90584-1314	90584-1414	90584-2314	90584-2414	90584-9314
		90584-9414				
	16	90584-1316	90584-1416	90584-2316	90584-2416	90584-9316
		90584-9416				
	18	90584-1318	90584-1418	90584-2318	90584-2418	90584-9318
		90584-9418				
	20	90584-1320	90584-1420	90584-2320	90584-2420	90584-9320
		90584-9420				
	22	90584-1322	90584-1422	90584-2322	90584-2422	90584-9322
		90584-9422				
	24	90584-1322	90584-1424	90584-2324	90584-2424	90584-9324
		90584-9422				
	26	90584-1322	90584-1426	90584-2326	90584-2426	90584-9326
		90584-9422				

Notes:

1. Actuation of unit is done using a manually pulled handle.
2. Improper use of this tool will lead to damage of insertion blades.
3. Not suitable for extreme environments such as high humidity or explosive atmospheres.
4. This fixture is designed for manual use only and connector to be supplied in loose piece form only.
5. Use 69127 series tools (PB14 or PB16) for large batch production.

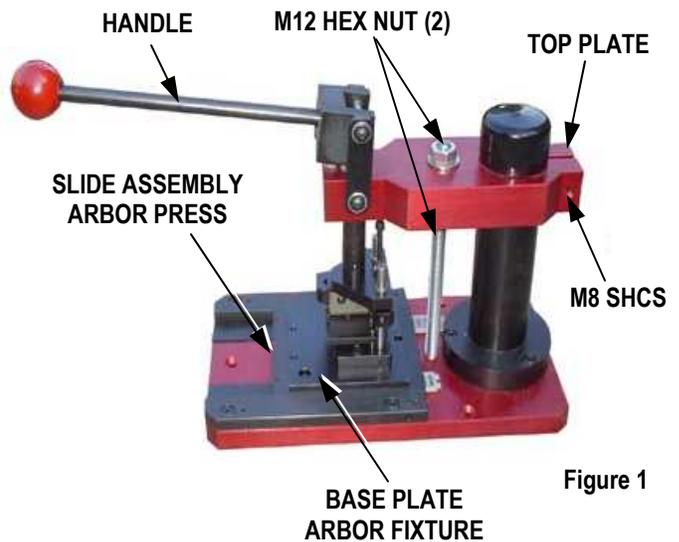


Figure 1

INSTALLATION

1. Remove Arbor Press fixture from the packing crate and packing material.
2. Loosen the M12 hex nuts and the M8 SHCS on the press.
3. Raise the top plate to allow the arbor fixture to slide under the ram assembly.
4. Place the Arbor Press fixture into Euro Arbor Press 69020-0660.
5. Using the M6 SHCS (2) in the Arbor Press fixture install the base plate to the slide assembly on the press.
6. Pull the handle down and tighten the (2) M4 set screws on the arbor fixture. This will attach the upper part of the fixture to the Ram. See Figure 1.
7. The Arbor Press is now ready for testing. (Height will need accurate setting, see Adjustments).

CAUTION: Be sure Arbor Press is anchored to a clean, sturdy workbench or table in a well-lighted area

OPERATION

1. After installing the fixture in the Arbor Press place the connector into the connector holder and slide it to the right until it meets the end stop block screw.
2. Slide the ribbon cable into the connector until it touches the end stop block.
3. Pull the handle down on the Arbor Press until it stops, this will complete the termination cycle.
4. Release the handle and remove the harness by sliding it to the left then pulling it straight out.

Using Arbor Press for Daisy Chain

This fixture will process Picoflex® connectors in both directions. It will process female and board-in versions on ribbon cable in jumper and daisy chain styles. Follow the steps below:

1. First remove the end stop block.
2. Insert the connector into the connector holder.
3. Insert the ribbon cable and pull it through to the required position.
4. Pull the handle down on the Arbor Press, this will complete the termination cycle.
5. Release the handle and slide the connector out.
6. The customer will be required to make additional equipment to accurately position connectors when making daisy chain harnesses.

Caution:

Care should be taken when making daisy chain harnesses. The order of assembly is very important.

This Arbor Press is not able to terminate a connector between two previously terminated connectors.

NOTE:

If adjustment is required see Section below.

ADJUSTMENTS

End Stop Adjustment

If the connector end stop block needs adjustment, loosen the M3 hex nut and turn the M3 screw to obtain a correct position. This screw is located on the rear of the fixture.

Height

If height adjustment is required loosen the M12 hex nuts and the M8 SHCS on the press. See Figure 1. Set height using the M12 hex nut.

The M8 SHCS in the side of the top plate must always be tightened securely before press operation.

Spare Parts

Customers are responsible for maintaining the Arbor Fixture. Spare parts are available. Moving and functioning parts can be damaged or wear out over time and will require replacement. Molex recommends that the customer keep some or all of them in stock to reduce production down time. These parts are listed below:

69127-5127	Insertion Blade
69127-5151	Support Plate

Options

Connector Clamp 69020-1935 (Order separately)

This small mechanical clamp is used to hold the connector in place during termination.

Maintenance

It is recommended that each operator of the tool be made aware of, and responsible for, the following maintenance steps:

1. Keep the fixture clean at all times. Remove dust, moisture, and other contaminants with a clean brush, or soft, lint free cloth.
2. Do not use any abrasive materials that could damage the tool.
3. Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively.
4. When tool is not in use store the tool in a clean, dry area.

Troubleshooting

▪ Symptom	▪ Solution
Bad Termination	▪ Make sure the handle is pulled down before it comes up again.
	▪ Check that the connector is pushed up to end stop block properly before the handle is pulled.
	▪ Check that the cable is inserted properly before the handle is pulled.
	▪ Check that the ends of the cable are cut square to the axis of cable.
	▪ For 90584 connectors, check all the legs are vertical and do not show any sign of damage.
Inconsistent Termination Heights	▪ Check the blades for damage or wear
	▪ Check the cable circuit size is correct for connector.
	▪ Check for movement within the die set, long term wear.
Die Set is not working	▪ Check the blade alignment. It may be hitting the connector holder block.
	▪ Check if any parts have moved out of position.
	▪ Bearings may have seized, remove and replace.

Warranty

All tools are warranted to be free of manufacturing defects for a period of **30 days**. Should such a defect occur, we would exchange the tool free of charge. This will not be applicable to altered, misused, or damaged tools. This tool is designed for hand use only. Any clamping, fixturing, or use of handle extensions voids this warranty.

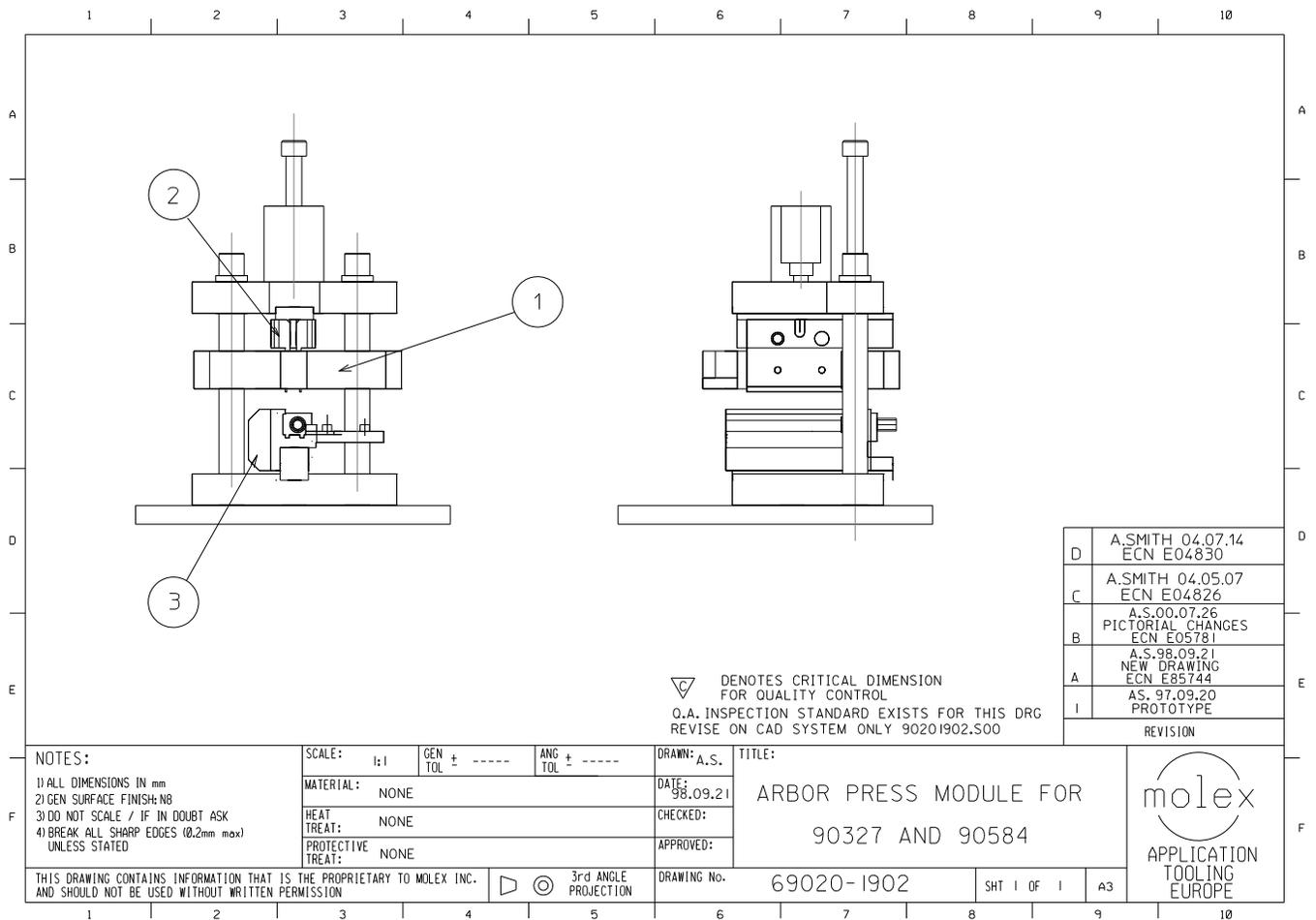
This tool is intended for low volume, prototyping, or repair requirements only. It is not intended as a production tool.

CAUTION: Molex termination specifications are valid only when used with Molex connectors and tooling.

PARTS LIST

Picoflex® Fixture for Arbor Press 69020-1902				
Item	Order No	Engineering No.	Description	Quantity
1	69020-1905	69020-1905	Sub-Assembly of Arbor Press Fixture	1
2	69127-5127	69127-5127	Insertion Blade	1
3	69020-1911	69020-1911	Connector Holder	1

Assembly

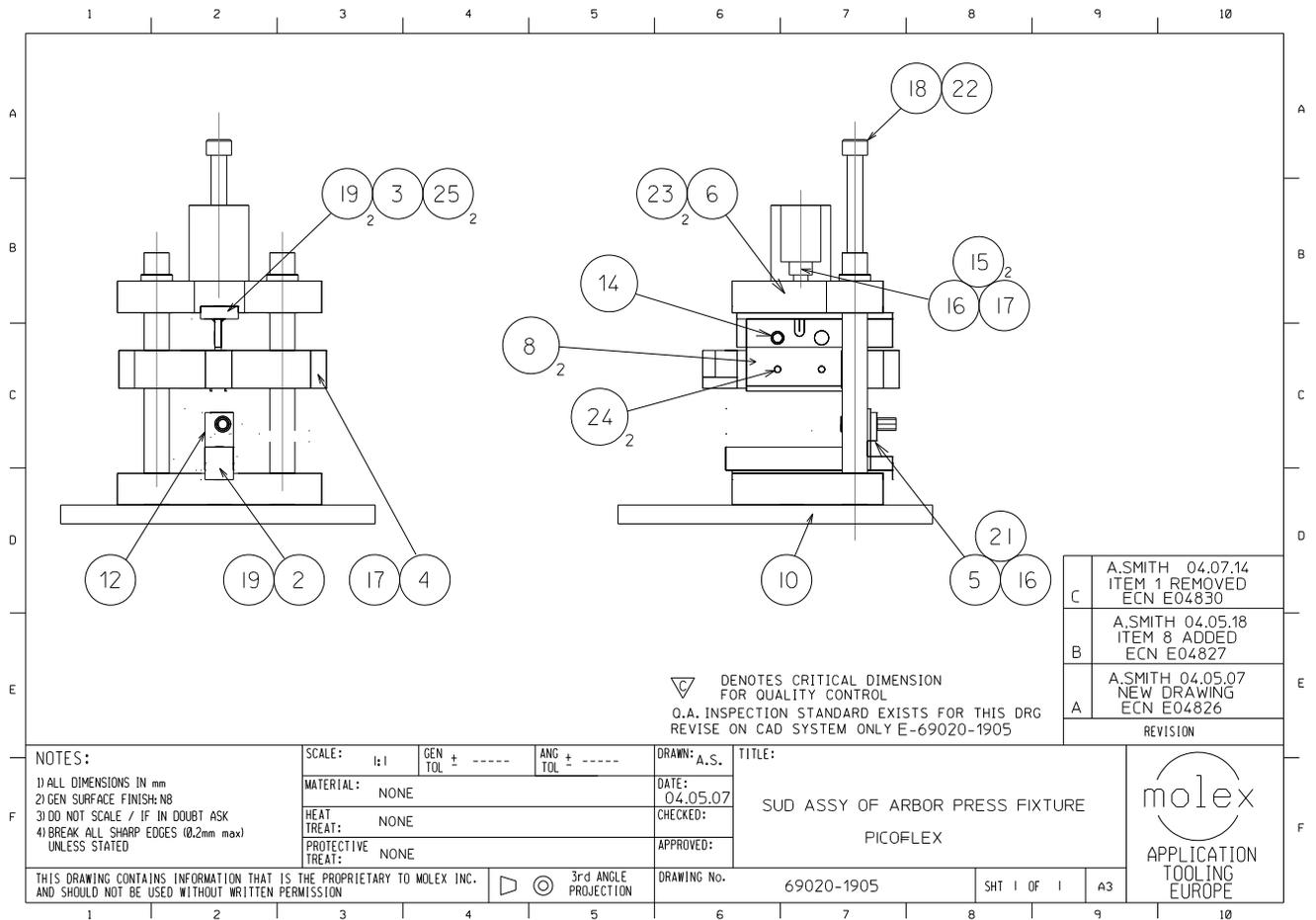


Parts List for Sub-Assembly 69020-1905

ITEM	DRAWING No	SIZE	QTY.	DESCRIPTION	REMARKS
1					
2	69020-1912	A3	1	BASE KEY	
3	69020-1913	A3	1	BLADE HOLDER	
4	69020-1914	A3	1	BLADE GUIDE	
5	69020-1915	A3	1	END STOP BLOCK	
6	69020-1925	A3	1	G.A. OF DIE SET	
7					
8	69127-5158	A3	2	INSERTION BLADE BLOCK	
9					
10	69020-1920	A3	1	BASE PLATE	
11					
12	69008-0703	A3	1	BRACKET	
13					
14	69127-5151	A3	1	SUPPORT PLATE	
15	69907-1400	---	2	M4 HEX NUT	
16	69907-1300	---	1	M3 HEX NUT	
17	69904-4405	---	3	M4 SET SCREW x 5LG	
18	69907-1500	---	1	M5 HEX NUT	
19	69901-1406	---	2	M4 SKT HD CAP SCREW x 6LG	
20					
21	69902-1310	---	1	M3LG PAN HD SCKT SCREW x10LG	
22	69901-1550	---	1	M5 SKT HD CAP SCREW x 50LG	
23	69901-1612	---	2	M6 SKT HD CAP SCREW x 12LG	
24	69810-5001	---	2	DOWEL DIA 2 x 5LG	
25	69809-1308	---	1	DOWEL DIA 3 x 8LG	

COMPILED A.S.	TITLE SUB ASSY OF ARBOR PRESS FIXTURE PICO FLEX										
DATE 04.05.07	ISSUE ECN E04830						SHEET 1 OF 1		DRAWING No 69020-1905 PL		
	A	B	C								

Assembly for Sub-Assembly 69020-1905

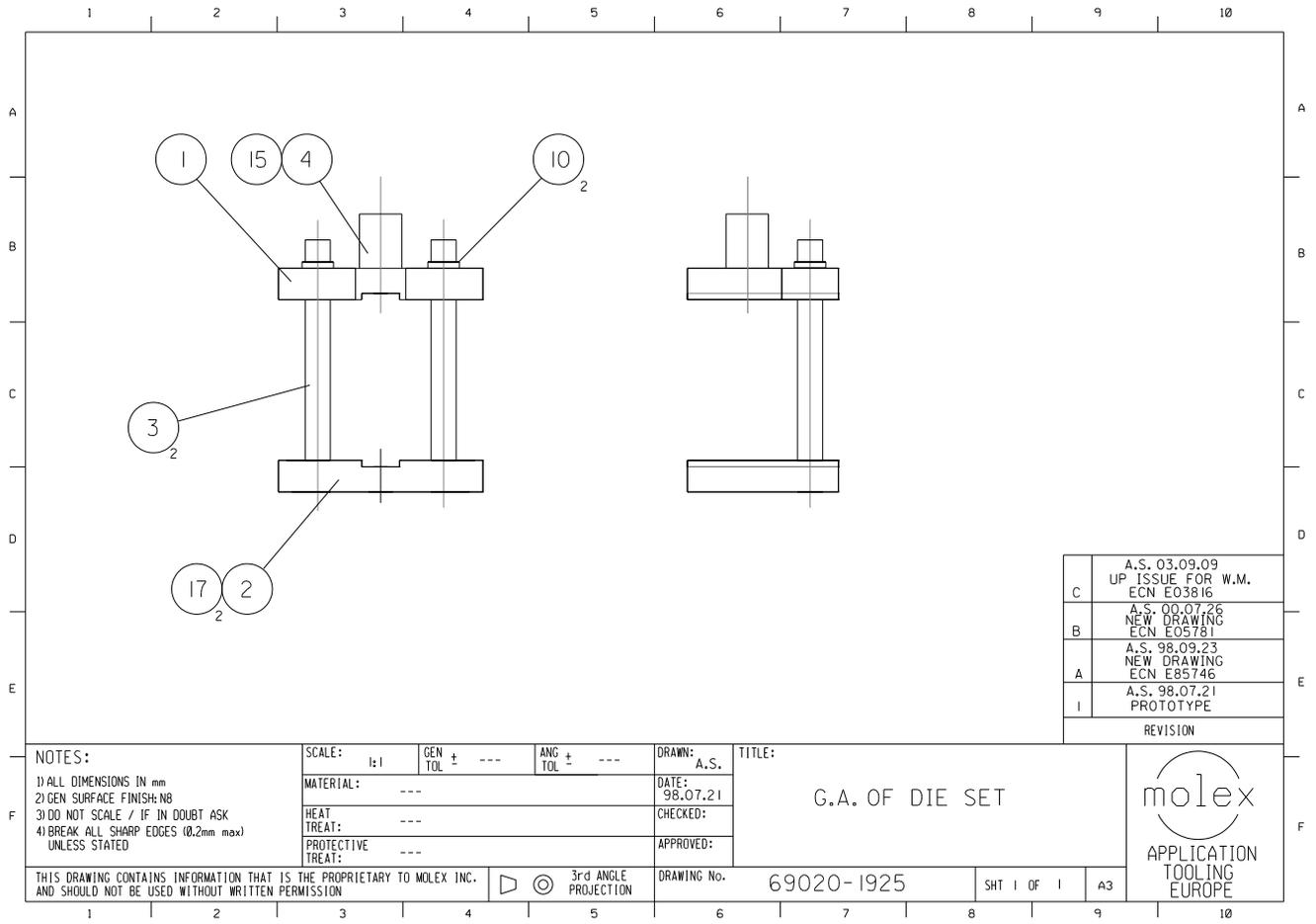


Parts List for G. A. of Die Set 69020-1925

ITEM	DRAWING No	SIZE	QTY.	DESCRIPTION	REMARKS
1	69020-1926	A3	1	TOP PLATE	
2	69020-1927	A3	1	BASE PLATE	
3	69020-1928	A3	2	PILLAR	
4	69020-1921	A3	1	ADAPTOR	
5					
6					
7					
8					
9					
10	69018-7215	---	2	BEARING MB0812DU	GLACIER
11					
12					
13					
14					
15	69901-1412	---	1	M4 x 12 LG SCK HD CAP SCREW	
16					
17	69901-1612	---	2	M6 x 12 LG SCK HD CAP SCREW	
18					
19					
20					
21					
22					
23					
24					
25					

COMPILED A.S.	TITLE G.A. OF DIE SET				
DATE 98.07.21	ISSUE ECN E03816			SHEET 1 OF 1	DRAWING No 69020-1925 PL
	A	B	C		

Parts List for G. A. of Die Set 69020-1925



C	A.S. 03.09.09 UP ISSUE FOR W.M. ECN E03816
B	A.S. 00.07.26 NEW DRAWING ECN E05781
A	A.S. 98.09.23 NEW DRAWING ECN E85746
I	A.S. 98.07.21 PROTOTYPE
REVISION	

NOTES: 1) ALL DIMENSIONS IN mm 2) GEN SURFACE FINISH: N8 3) DO NOT SCALE / IF IN DOUBT ASK 4) BREAK ALL SHARP EDGES (0.2mm max) UNLESS STATED	SCALE: 1:1	GEN TOL ± ---	ANG TOL ± ---	DRAWN: A.S.	TITLE: G.A. OF DIE SET		
	MATERIAL: ---	DATE: 98.07.21	CHECKED:	APPROVED:			
	HEAT TREAT: ---	DRAWING No. 69020-1925		SHT 1 OF 1			A3
	PROTECTIVE TREAT: ---	THIS DRAWING CONTAINS INFORMATION THAT IS THE PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		3rd ANGLE PROJECTION			

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