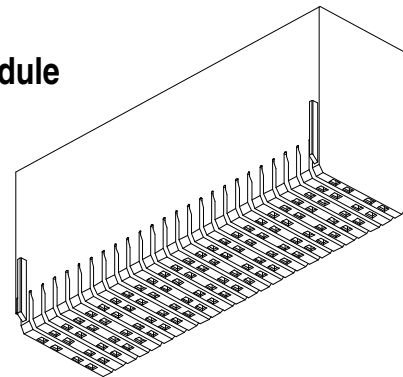




**\*VHDM-HSD™ Backplane Signal Insertion Module  
Application Tooling Specification  
Press-In Tool  
Order No. 62202-0217**



**FEATURES**

- Polarized tool prevents product damage.
- Tool provides uniform distribution of press force across entire pin array.
- May be used as a stand-alone tool or mounted in an optional tooling holder with other Molex press-in tools.

**SCOPE**

Products: 2.00mm (.079") Pitch \*VHDM-HSD™ Standard Shield Signal Module Assembly, (150 Circuits), 74979, 74980, 74981, and 74984, Series 6 Rows by 25 Columns Assemblies. See Product List below for specific part numbers.

**Product List**

The following is a partial list of the product order numbers and their specifications this tool is designed to run. Updates to this list are available on [www.molex.com](http://www.molex.com).

74979 Series Number							
Guide Style	Columns	Assembly Order Number					
Open End	6	74979-2501	74979-2502	74979-2503	74979-2504	74979-2506	74979-2507
		74979-2508	74979-2509				
		74979-8501	74979-8502	74979-8503	74979-8504	74979-8506	74979-8507
		74979-8508	74979-8509				

74980 Series Number							
Guide Style	Columns	Assembly Order Number					
Right	6	74980-2501	74980-2502	74980-2503	74980-2504	74980-2506	74980-2507
		74980-2508	74980-2509	74980-2511	74980-2512	74980-2513	74980-2514
		74980-2516	74980-2517	74980-2518	74980-2519	74980-2521	74980-2522
		74980-2523	74980-2524	74980-2526	74980-2527	74980-2528	74980-2529
		74980-2531	74980-2532	74980-2533	74980-2534	74980-2536	74980-2537
		74980-2538	74980-2539	74980-2541	74980-2542	74980-2543	74980-2544
		74980-2546	74980-2547	74980-2548	74980-2549	74980-2551	74980-2552
		74980-2553	74980-2554	74980-2556	74980-2557	74980-2558	74980-2559
		74980-2561	74980-2562	74980-2563	74980-2564	74980-2566	74980-2567
		74980-2568	74980-2569	74980-2571	74980-2572	74980-2573	74980-2574
		74980-2576	74980-2577	74980-2578	74980-2579	74980-2581	74980-2582
		74980-2583	74980-2584	74980-2586	74980-2587	74980-2588	74980-2589
		74980-8501	74980-8502	74980-8503	74980-8504	74980-8506	74980-8507
		74980-8508	74980-8509	74980-8511	74980-8512	74980-8513	74980-8514
		74980-8516	74980-8517	74980-8518	74980-8519	74980-8521	74980-8522
		74980-8523	74980-8524	74980-8526	74980-8527	74980-8528	74980-8529
		74980-8531	74980-8532	74980-8533	74980-8534	74980-8536	74980-8537
		74980-8538	74980-8539	74980-8541	74980-8542	74980-8543	74980-8544
		74980-8546	74980-8547	74980-8548	74980-8549	74980-8551	74980-8552
		74980-8553	74980-8554	74980-8556	74980-8557	74980-8558	74980-8559

74980 Series Number							
Guide Style	Columns	Assembly Order Number					
Right	6	74980-8561	74980-8562	74980-8563	74980-8564	74980-8566	74980-8567
		74980-8568	74980-8569	74980-8571	74980-8572	74980-8573	74980-8574
		74980-8576	74980-8577	74980-8578	74980-8579	74980-8581	74980-8582
		74980-8583	74980-8584	74980-8586	74980-8587	74980-8588	74980-8589

74981 Series Number							
Guide Style	Columns	Assembly Order Number					
Left	6	74981-2501	74981-2502	74981-2503	74981-2504	74981-2506	74981-2507
		74981-2508	74981-2509	74981-2511	74981-2512	74981-2513	74981-2514
		74981-2516	74981-2517	74981-2518	74981-2519	74981-2521	74981-2522
		74981-2523	74981-2524	74981-2526	74981-2527	74981-2528	74981-2529
		74981-2531	74981-2532	74981-2533	74981-2534	74981-2536	74981-2537
		74981-2538	74981-2539	74981-2541	74981-2542	74981-2543	74981-2544
		74981-2546	74981-2547	74981-2548	74981-2549	74981-2551	74981-2552
		74981-2553	74981-2554	74981-2556	74981-2557	74981-2558	74981-2559
		74981-2561	74981-2562	74981-2563	74981-2564	74981-2566	74981-2567
		74981-2568	74981-2569	74981-2571	74981-2572	74981-2573	74981-2574
		74981-2576	74981-2577	74981-2578	74981-2579	74981-2581	74981-2582
		74981-2583	74981-2584	74981-2586	74981-2587	74981-2588	74981-2589
		74981-8501	74981-8502	74981-8503	74981-8504	74981-8506	74981-8507
		74981-8508	74981-8509	74981-8511	74981-8512	74981-8513	74981-8514
		74981-8516	74981-8517	74981-8518	74981-8519	74981-8521	74981-8522
		74981-8523	74981-8524	74981-8526	74981-8527	74981-8528	74981-8529
		74981-8531	74981-8532	74981-8533	74981-8534	74981-8536	74981-8537
		74981-8538	74981-8539	74981-8541	74981-8542	74981-8543	74981-8544
		74981-8546	74981-8547	74981-8548	74981-8549	74981-8551	74981-8552
		74981-8553	74981-8554	74981-8556	74981-8557	74981-8558	74981-8559
		74981-8561	74981-8562	74981-8563	74981-8564	74981-8566	74981-8567
		74981-8568	74981-8569	74981-8571	74981-8572	74981-8573	74981-8574
		74981-8576	74981-8577	74981-8578	74981-8579	74981-8581	74981-8582
		74981-8583	74981-8584	74981-8586	74981-8587	74981-8588	74981-8589
74981-8501	74981-8502	74981-8503	74981-8504	74981-8506	74981-8507		

74984 Series Number							
Guide Style	Columns	Assembly Order Number					
Custom	6	74984-0002	74984-0015	74984-0016	74984-0017	74984-0020	74984-0021
		74984-0022	74984-0027	74984-0028	74984-9997	74984-9999	

\*\*VHDM-HSD™ is a registered trademark of Teradyne, Inc.

## Tool Setup

Depending on the number of connectors to be installed and/or the press used, this tool can be used alone or with a group of press-in tools, mounted in a 62201-95XX tooling holder (ordered separately). See Figure 1.

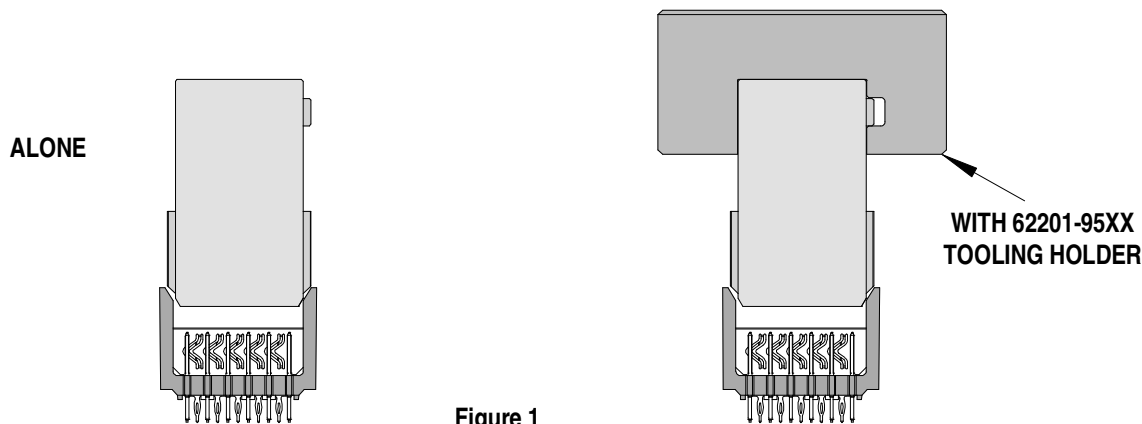


Figure 1

## Tool Installation

The 62201-95XX tooling holder is available in a variety of lengths to accommodate multiple press-in tools.

Tooling Holder Part Number	Rail Overall Length
62201-9501	24mm (0.94 in)
62201-9502	72mm (2.83 in)
62201-9503	156mm (6.14 in)
62201-9504	216mm (8.50 in)
62201-9509	254mm (10.0 in)
62201-9511	305mm (12.0 in)

Reference: The 62202-0217 Press-In Tool is 49.9mm (1.966 in.) long by 25.0mm (.984 in.) high.

## Printed Circuit Board (PCB) Support

The \*VHDM-HSD™ connectors requires a large amount of force per pin to press into the PCB. To prevent excessive PCB flexure and/or damage to the PCB, a support plate is strongly recommended directly beneath the connector hole pattern.

Due to the custom nature of every application, Molex does not offer any PCB support plate. The customer must furnish their own support plate.

When creating the PCB support plate, remember to allow clearance for the connector pins as they pass through the PCB thickness.

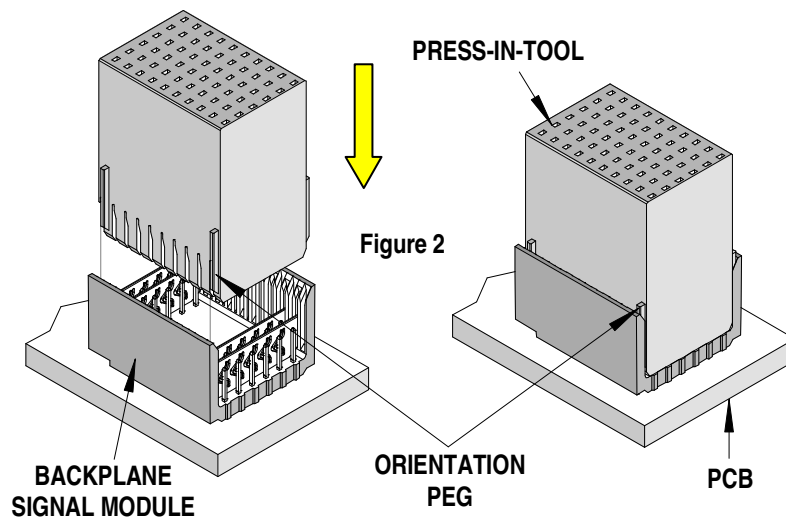
## Press Equipment Recommendations

Many types of presses can be used to install \*VHDM-HSD™ connectors, but to assure consistent connector installation Molex recommends the following press criteria:

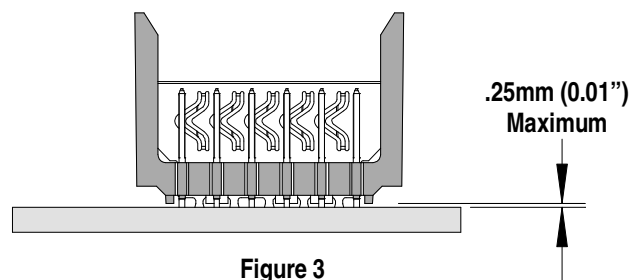
1. The capability to detect force variations as low as 4.5kg (10 lb) during the press-in cycle; excessive force measurements should stop the press-in cycle.
2. The rate of pressing can be regulated as low as 0.13mm (0.005 in) per second.
3. Press stroke control to within 0.25mm (0.010 in).
4. Total press stroke must be at least 19mm (0.75 in).
5. For statistical purposes, automatic collection of force and distance data.

## Tool Operation

1. Carefully insert, by hand, the backplane signal module(s) into the PCB hole pattern. Make sure the connector(s) are oriented properly.
2. Insert the press-in-tool into the backplane signal module assembly with the orientation peg on the tool entering the groove in the connector housing. Make sure all the pins and shields fit into the proper slots. See Figure 2.



3. Using the application tool and an appropriate press, seat the header assembly until there is less than 0.25mm (0.01 in) clearance between the bottom of the plastic housing and the surface of the PCB. See Figure 3.



**CAUTION:** To prevent injury, never operate any press without the guards in place. Refer to the press manufacturer's instruction manual.

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

### Contact Information

For more information on Molex application tooling please contact Molex at 1-800-786-6539.

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