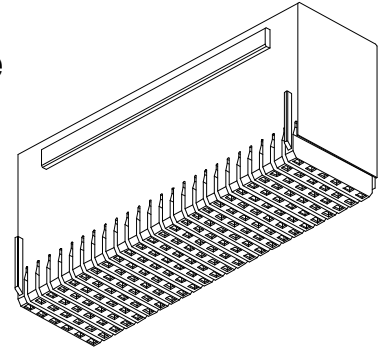




**\*VHDM® Backplane Signal Insertion Module  
Application Tooling Specification  
Press-In Tool  
Order No. 62202-0204**



**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: \*VHDM® Advanced Mate Signal Module Assembly, (150 Circuits), 74057, 74058, 74059, 74077, 74335, and 74336 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).

74057 Series Number							
Guide Style	Columns	Assembly Order Number					
Open End	6	74057-2501	74057-2502	74057-2503	74057-2504	74057-2506	74057-2507
		74057-2508	74057-2509				
		74057-2601	74057-2602	74057-2603	74057-2604	74057-2606	74057-2607
		74057-2608	74057-2609				
		74057-9001	74057-9002	74057-9003	74057-9004	74057-9006	74057-9007
		74057-9008	74057-9009				
		74057-8601	74057-8602	74057-8603	74057-8604	74057-8606	74057-8607
		74057-8608	74057-8609				

74058 Series Number							
Guide Style	Columns	Assembly Order Number					
Signal End	6	74058-2501	74058-2502	74058-2503	74058-2504	74058-2506	74058-2507
		74058-2508	74058-2509	74058-2511	74058-2512	74058-2513	74058-2514
		74058-2516	74058-2517	74058-2518	74058-2519	74058-2521	74058-2522
		74058-2523	74058-2524	74058-2526	74058-2527	74058-2528	74058-2529
		74058-2531	74058-2532	74058-2533	74058-2534	74058-2536	74058-2537
		74058-2538	74058-2539	74058-2541	74058-2542	74058-2543	74058-2544
		74058-2546	74058-2547	74058-2548	74058-2549	74058-2551	74058-2552
		74058-2553	74058-2554	74058-2556	74058-2557	74058-2558	74058-2559
		74058-2561	74058-2562	74058-2563	74058-2564	74058-2566	74058-2567
		74058-2568	74058-2569	74058-2571	74058-2572	74058-2573	74058-2574
		74058-2576	74058-2577	74058-2578	74058-2579	74058-2581	74058-2582
		74058-2583	74058-2584	74058-2586	74058-2587	74058-2588	74058-2589
		74058-2601	74058-2602	74058-2603	74058-2604	74058-2606	74058-2607
		74058-2608	74058-2609	74058-2611	74058-2612	74058-2613	74058-2614
		74058-2616	74058-2617	74058-2618	74058-2619	74058-2621	74058-2622
		74058-2623	74058-2624	74058-2626	74058-2627	74058-2628	74058-2629
		74058-2631	74058-2632	74058-2633	74058-2634	74058-2636	74058-2637

74058 Series Number							
Guide Style	Columns	Assembly Order Number					
Signal End	6	74058-2638	74058-2639	74058-2641	74058-2642	74058-2643	74058-2644
		74058-2646	74058-2647	74058-2648	74058-2649	74058-2651	74058-2652
		74058-2653	74058-2654	74058-2656	74058-2657	74058-2658	74058-2659
		74058-2661	74058-2662	74058-2663	74058-2664	74058-2666	74058-2667
		74058-2668	74058-2669	74058-2671	74058-2672	74058-2673	74058-2674
		74058-2676	74058-2677	74058-2678	74058-2679	74058-2681	74058-2682
		74058-2683	74058-2684	74058-2686	74058-2687	74058-2688	74058-2689
		74058-8501	74058-8502	74058-8503	74058-8504	74058-8506	74058-8507
		74058-8508	74058-8509	74058-8511	74058-8512	74058-8513	74058-8514
		74058-8516	74058-8517	74058-8518	74058-8519	74058-8521	74058-8522
		74058-8523	74058-8524	74058-8526	74058-8527	74058-8528	74058-8529
		74058-8531	74058-8532	74058-8533	74058-8534	74058-8536	74058-8537
		74058-8538	74058-8539	74058-8541	74058-8542	74058-8543	74058-8544
		74058-8546	74058-8547	74058-8548	74058-8549	74058-8551	74058-8552
		74058-8553	74058-8554	74058-8556	74058-8557	74058-8558	74058-8559
		74058-8561	74058-8562	74058-8563	74058-8564	74058-8566	74058-8567
		74058-8568	74058-8569	74058-8571	74058-8572	74058-8573	74058-8574
		74058-8576	74058-8577	74058-8578	74058-8579	74058-8581	74058-8582
		74058-8583	74058-8584	74058-8586	74058-8587	74058-8588	74058-8589
		74058-8601	74058-8602	74058-8603	74058-8604	74058-8606	74058-8607
		74058-8608	74058-8609	74058-8611	74058-8612	74058-8613	74058-8614
		74058-8616	74058-8617	74058-8618	74058-8619	74058-8621	74058-8622
		74058-8623	74058-8624	74058-8626	74058-8627	74058-8628	74058-8629
		74058-8631	74058-8632	74058-8633	74058-8634	74058-8636	74058-8637
		74058-8638	74058-8639	74058-8641	74058-8642	74058-8643	74058-8644
		74058-8646	74058-8647	74058-8648	74058-8649	74058-8651	74058-8652
		74058-8653	74058-8654	74058-8656	74058-8657	74058-8658	74058-8659
		74058-8661	74058-8662	74058-8663	74058-8664	74058-8666	74058-8667
		74058-8668	74058-8669	74058-8671	74058-8672	74058-8673	74058-8674
		74058-8676	74058-8677	74058-8678	74058-8679	74058-8681	74058-8682
74058-8683	74058-8684	74058-8686	74058-8687	74058-8688	74058-8689		

74059 Series Number							
Guide Style	Columns	Assembly Order Number					
Shield End	6	74059-2501	74059-2502	74059-2503	74059-2504	74059-2506	74059-2507
		74059-2508	74059-2509	74059-2511	74059-2512	74059-2513	74059-2514
		74059-2516	74059-2517	74059-2518	74059-2519	74059-2521	74059-2522
		74059-2523	74059-2524	74059-2526	74059-2527	74059-2528	74059-2529
		74059-2531	74059-2532	74059-2533	74059-2534	74059-2536	74059-2537
		74059-2538	74059-2539	74059-2541	74059-2542	74059-2543	74059-2544
		74059-2546	74059-2547	74059-2548	74059-2549	74059-2551	74059-2552
		74059-2553	74059-2554	74059-2556	74059-2557	74059-2558	74059-2559
		74059-2561	74059-2562	74059-2563	74059-2564	74059-2566	74059-2567
		74059-2568	74059-2569	74059-2571	74059-2572	74059-2573	74059-2574
		74059-2576	74059-2577	74059-2578	74059-2579	74059-2581	74059-2582
		74059-2583	74059-2584	74059-2586	74059-2587	74059-2588	74059-2589
		74059-2601	74059-2602	74059-2603	74059-2604	74059-2606	74059-2607
		74059-2608	74059-2609	74059-2611	74059-2612	74059-2613	74059-2614
		74059-2616	74059-2617	74059-2618	74059-2619	74059-2621	74059-2622
		74059-2623	74059-2624	74059-2626	74059-2627	74059-2628	74059-2629
		74059-2631	74059-2632	74059-2633	74059-2634	74059-2636	74059-2637
		74059-2638	74059-2639	74059-2641	74059-2642	74059-2643	74059-2644
		74059-2646	74059-2647	74059-2648	74059-2649	74059-2651	74059-2652

74059 Series Number							
Guide Style	Columns	Assembly Order Number					
Shield End	6	74059-2653	74059-2654	74059-2656	74059-2657	74059-2658	74059-2659
		74059-2661	74059-2662	74059-2663	74059-2664	74059-2666	74059-2667
		74059-2668	74059-2669	74059-2671	74059-2672	74059-2673	74059-2674
		74059-2676	74059-2677	74059-2678	74059-2679	74059-2681	74059-2682
		74059-2683	74059-2684	74059-2686	74059-2687	74059-2688	74059-2689
		74059-8501	74059-8502	74059-8503	74059-8504	74059-8506	74059-8507
		74059-8508	74059-8509	74059-8511	74059-8512	74059-8513	74059-8514
		74059-8516	74059-8517	74059-8518	74059-8519	74059-8521	74059-8522
		74059-8523	74059-8524	74059-8526	74059-8527	74059-8528	74059-8529
		74059-8531	74059-8532	74059-8533	74059-8534	74059-8536	74059-8537
		74059-8538	74059-8539	74059-8541	74059-8542	74059-8543	74059-8544
		74059-8546	74059-8547	74059-8548	74059-8549	74059-8551	74059-8552
		74059-8553	74059-8554	74059-8556	74059-8557	74059-8558	74059-8559
		74059-8561	74059-8562	74059-8563	74059-8564	74059-8566	74059-8567
		74059-8568	74059-8569	74059-8571	74059-8572	74059-8573	74059-8574
		74059-8576	74059-8577	74059-8578	74059-8579	74059-8581	74059-8582
		74059-8583	74059-8584	74059-8586	74059-8587	74059-8588	74059-8589
		74059-8601	74059-8602	74059-8603	74059-8604	74059-8606	74059-8607
		74059-8608	74059-8609	74059-8611	74059-8612	74059-8613	74059-8614
		74059-8616	74059-8617	74059-8618	74059-8619	74059-8621	74059-8622
		74059-8623	74059-8624	74059-8626	74059-8627	74059-8628	74059-8629
		74059-8631	74059-8632	74059-8633	74059-8634	74059-8636	74059-8637
		74059-8638	74059-8639	74059-8641	74059-8642	74059-8643	74059-8644
		74059-8646	74059-8647	74059-8648	74059-8649	74059-8651	74059-8652
		74059-8653	74059-8654	74059-8656	74059-8657	74059-8658	74059-8659
		74059-8661	74059-8662	74059-8663	74059-8664	74059-8666	74059-8667
		74059-8668	74059-8669	74059-8671	74059-8672	74059-8673	74059-8674
		74059-8676	74059-8677	74059-8678	74059-8679	74059-8681	74059-8682
		74059-8683	74059-8684	74059-8686	74059-8687	74059-8688	74059-8689

74077 Series Number							
Guide Style	Columns	Assembly Order Number					
Custom	6	74077-0003	74077-0004	74077-0005	74077-0009	74077-0010	

74335 Series Number							
Guide Style	Columns	Assembly Order Number					
Open	6	74335-2501	74335-2502	74335-2503	74335-2504	74335-2506	74335-2507
		74335-2508	74335-2509				

74336 Series Number							
Guide Style	Columns	Assembly Order Number					
Shield End	6	74336-2501	74336-2502	74336-2503	74336-2504	74336-2506	74336-2507
		74336-2508	74336-2509				

\*VHDM® 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.

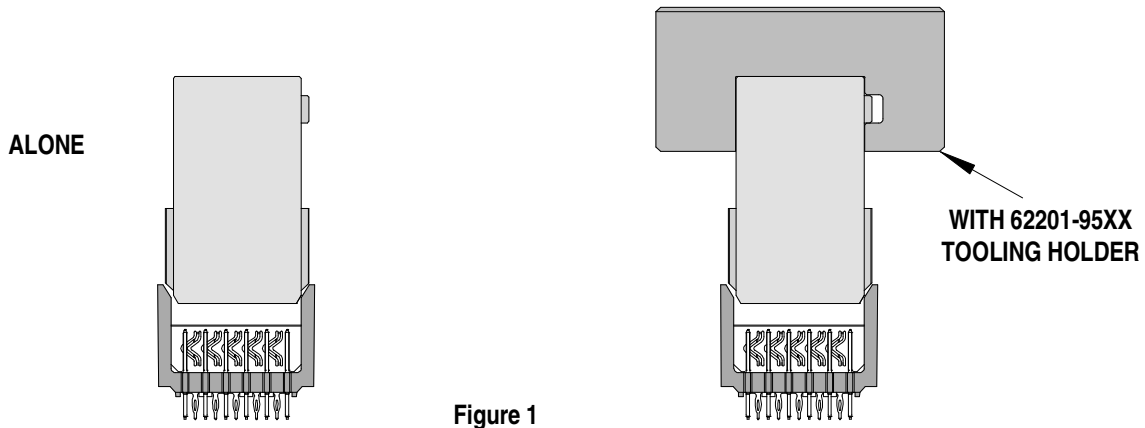


Figure 1

## 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 62202-0204 Press-In Tool is 49.9mm (1.966 in.) long by 25.0mm (.984 in.) high.

## Printed Circuit Board (PCB) Support

The \*VHDM® 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.

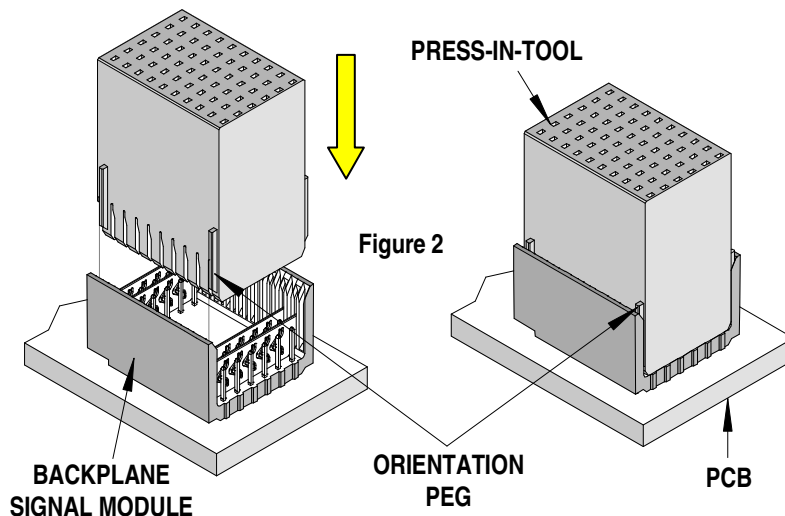
## Press Equipment Recommendations

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

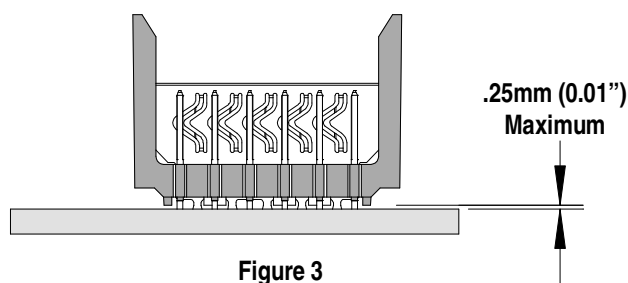
1. The capability to detect force variations as low as 4.5kg (10 lb) during the press-in cycle; excessive force measurements should stop the press-in cycle.
2. The rate of pressing can be regulated as low as 0.13mm (0.005 in) per second.
3. Press stroke control to within 0.25mm (0.010 in).
4. Total press 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.

**Americas Headquarters**

Lisle, Illinois 60532 U.S.A.  
1-800-78MOLEX  
amerinfo@molex.com

**Far East North Headquarters**

Yamato, Kanagawa, Japan  
81-462-65-2324  
feninfo@molex.com

**Far East South Headquarters**

Jurong, Singapore  
65-6-268-6868  
fesinfo@molex.com

**European Headquarters**

Munich, Germany  
49-89-413092-0  
eurinfo@molex.com

**Corporate Headquarters**

2222 Wellington Ct.  
Lisle, IL 60532 U.S.A.  
630-969-4550  
Fax: 630-969-1352

Visit our Web site at <http://www.molex.com>