

# Wafer Peel Back Test Option Operating Guide

## Function

GPD Global's WPBFT (Wafer Peel Back Force Tester) accurately measures and records the peel-back force required to remove PVC tape from wafer chips used in the semiconductor industry. The WPBFT accommodates 100 mm long wafer chip with widths of 10 mm, 15 mm, 20 mm, 25 mm, and 30 mm. Test results are recorded for incoming or outgoing taped components.

## Set Up WPBFT

To verify that the WPBFT (PBFT with Wafer Option) is working properly, verify that vacuum is a minimum of 21 in (Hg) to secure the wafer sample for testing.

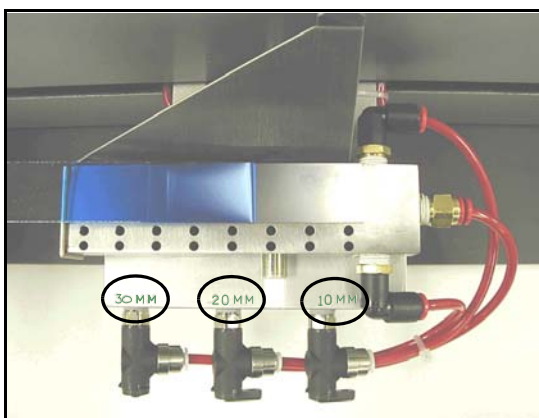
Recalibration of the strain gauge has already been performed at the factory per the *Calibrate PBFT Strain Gauge* instructions in the *PBFT VS SPC User Guide*.

## Using WPBFT

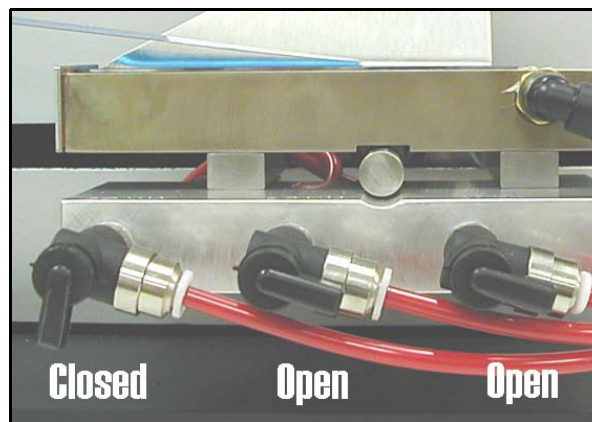
To operate the WPBFT (PBFT with Wafer Option):

1. Power on the WPBFT, computer, and printer per normal procedures.
2. Verify that the appropriate valve(s) on the Wafer Peel Back Option are open/closed according to the width of wafer strip to be tested:

	30 mm Valve		20 mm Valve		10 mm Valve	
	Open	Closed	Open	Closed	Open	Closed
10 mm - 15 mm Strip		X		X	X	
20 mm - 25 mm Strip		X	X		X	
30 mm Strip	X		X		X	



**Figure A-B** Top view of Wafer Option and valve size indicators; from left to right, the valves are designated as 30 mm, 20 mm, and 10 mm.

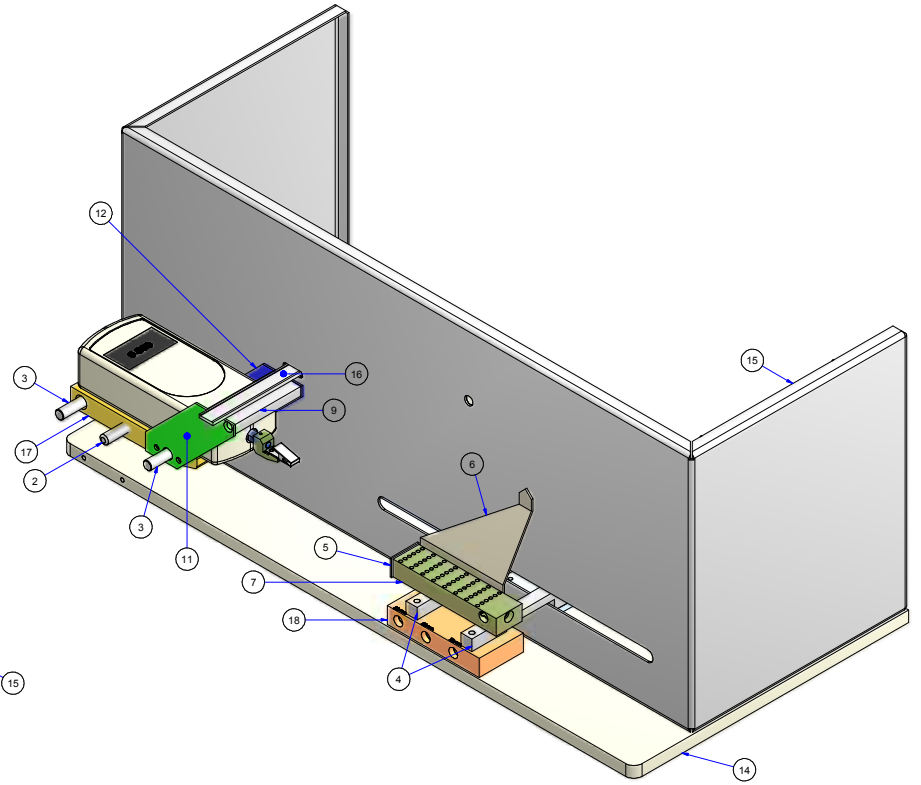
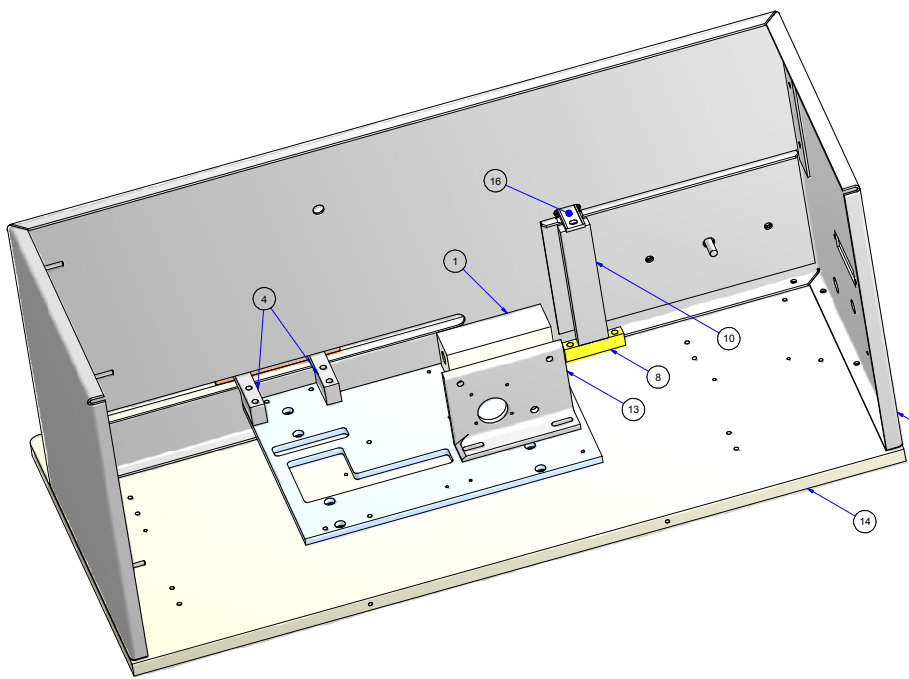


**Figure A-C** End view of Wafer Option indicating an example of "open" and "closed" valve positions; valve settings shown here are set for the 20 mm wafer strip.

3. Prepare a sample wafer strip: the strip must be 100 mm long with a 200 mm length of PVC tape — half should remain attached to the wafer and the other 100 mm length of tape should extend beyond the end of the wafer strip. Bend the unattached length of tape back on itself.
4. Load and align the sample wafer strip on the Vacuum Plate of the Wafer Peel Back Option.
5. Secure the bent end of the PVC tape in the Tape Clamp Clip.
6. As necessary, adjust the lateral position of the Strain Gauge so the gauge is in-line and centered with the wafer strip tape.
7. Power on the Strain Gauge, then zero out the gauge and verify the units setting.
8. Set up and initiate a test by performing normal SPC Software Package procedures: logging onto the SPC software, setting the speed selector to the desired testing speed, and activating a test run. Peel-back force will be displayed on the strain gauge liquid crystal display, and test results and speeds will be recorded by the SPC Software package.

Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	10_4281	PNEUMATIC MANIFOLD BLOCK
2	1	PBT-0024	ADJUSTMENT ROD
3	2	PBT-0026	SLIDE SHAFT
4	2	PBT-3001	GUIDE MOUNT
5	1	PBT-3002	END STOP
6	1	PBT-3003	POINTER
7	1	PBT-3004	VACUUM PLATE
8	1	PBT-3005	BASE_SUPPORT POST
9	1	PBT-3006	SCALE SUPPORT
10	1	PBT-3007	SUPPORT POST
11	1	PBT-3008	UPRIGHT, RIGHT SIDE
12	1	PBT-3009	UPRIGHT, LEFT SIDE
13	1	PBT-3010	DRIVE MOTOR MOUNT
14	1	PBT-3011	BASE PLATE, WAFER PEEL BACK MOD.
15	1	PBT-3012	FRONT PLT, WAFER PEEL BACK MOD.
16	1	PBT-3013	SCALE MODIFICATION
17	1	PBT-3027	INSTRUMENT MOUNT BAR
18	1	PBT-3030	MANIFOLD-3 PORT

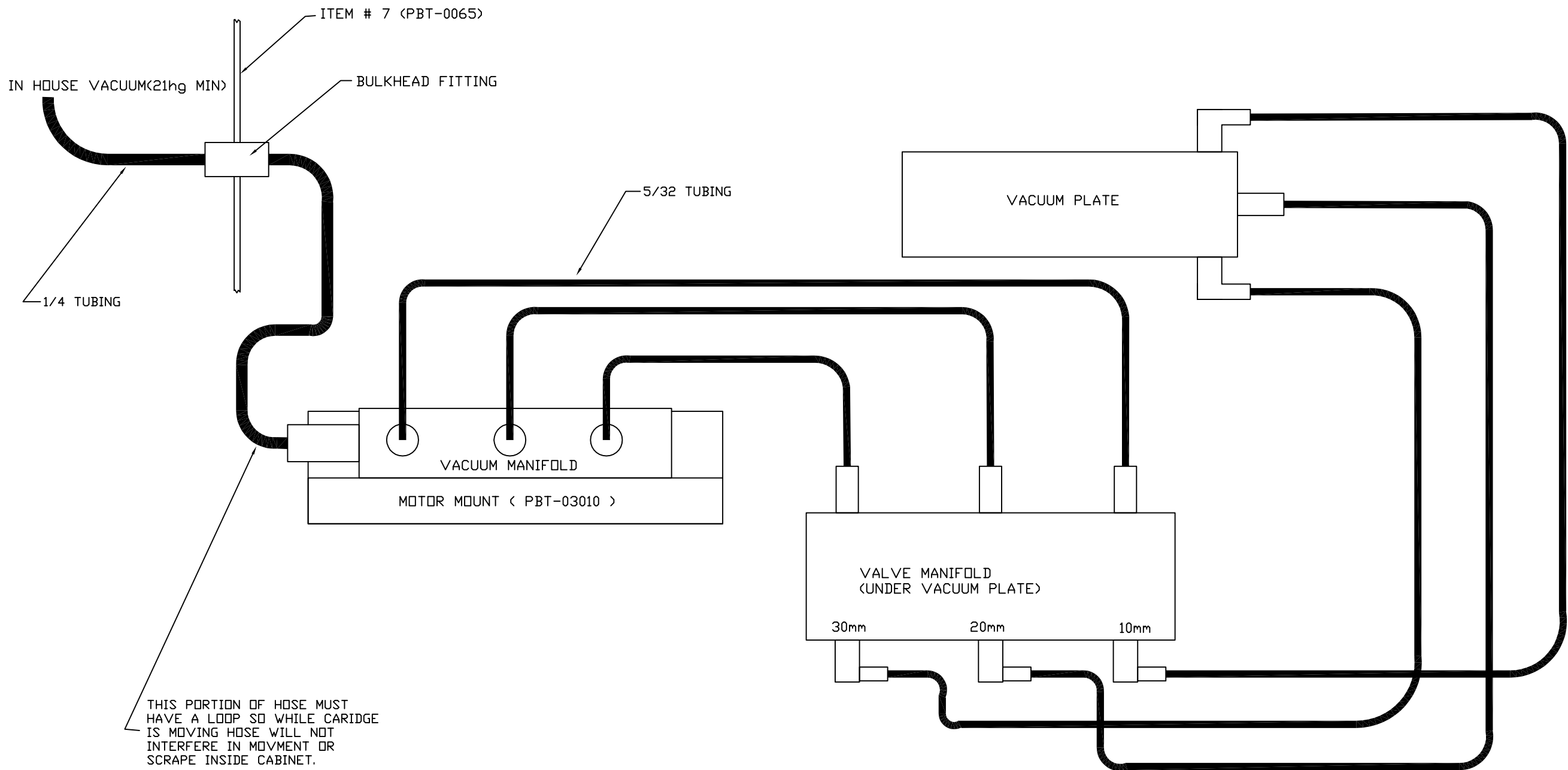
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
A	05/22/2007	SO	ORIGINAL ISSUE



TOLERANCES UNLESS OTHERWISE SPECIFIED		DESCRIPTION	
FRACTIONS	± 0.01	NETIC	WAFAER TEST ASSEMBLY
XXX	± 0.015	0.1 MM	± 0.4 MM
XXXX	± 0.02	0.01 MM	± 0.1 MM
ANGULAR	± 0.05		
RADIUS	± 0.005 F.L.R.		
FINISH		MATERIAL NOTED	
NOTED		DWG NO	REV
		PBT-3000	
REAT TREATMENT		DWG SIZE	
		D	
		DRAWN BY	SO 5/22/2007 SHEET 1 OF 1



REV	DATE	BY	DESCRIPTION
A	-----	----	ORIGINAL ISSUE



THIS PORTION OF HOSE MUST HAVE A LOOP SO WHILE CARIDGE IS MOVING HOSE WILL NOT INTERFERE IN MOVMENT OR SCRAPE INSIDE CABINET.



TOLERANCES UNLESS OTHERWISE SPECIFIED		NAME: PLUMBING DIAGRAM	
FRACTIONS	±1/32	METRIC	±0.4MM
2 PLACE DECIMAL	±0.015	0.0 MM	±0.1MM
3 PLACE DECIMAL	±0.005	0.00MM	
ANGULARITY	±0.5°		
RUNOUT	±0.003 T.I.R.		
DRAWN BY: ARM		DWG SIZE	FINISH: XXXX
CHECKED BY:		B	
DATE: 2-20-01		DO NOT SCALE DRAWING	PART NUMBER
SCALE: N/A			PBT-3028
			REV
			A